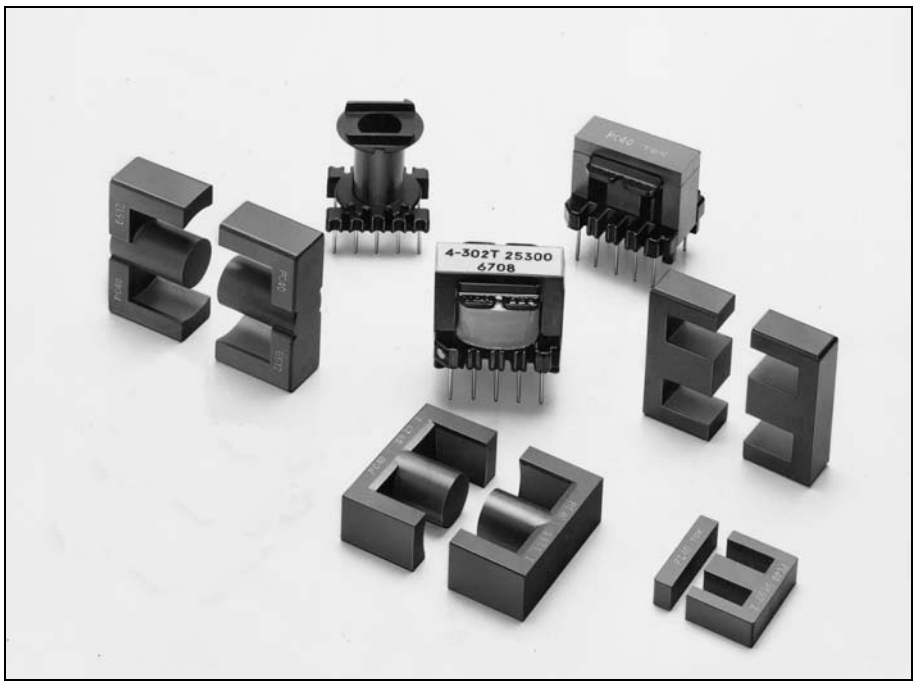
Ferrite for Switching Power Supplies
E Series

Cores
EI12.5 to EI60
EE8 to EE62.3/62/6
EF12.6 to EF32
EER25.5 to EER49
ETD19 to ETD49

Bobbins
BE8 to BE62.3
BEER25.5 to BEER49
BETD19 to BETD24

Accessories



Ordering Code System

Cores

PC40 EI 30 – A200

- PC40 — Material
- EI 30 — Size of E core
- A200 — AL-value(Z: without air gap)

Bobbins

B E30 – 1110 CPFR

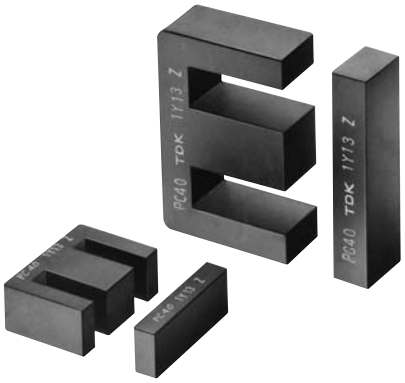
- B — Symbol of Bobbin
- E30 — Size of E core
- 1 — Code of Bobbin Material
- 1 — Number of Section
- 0 — Number of Terminal Pin
- CPFR — Type of Terminal Pin

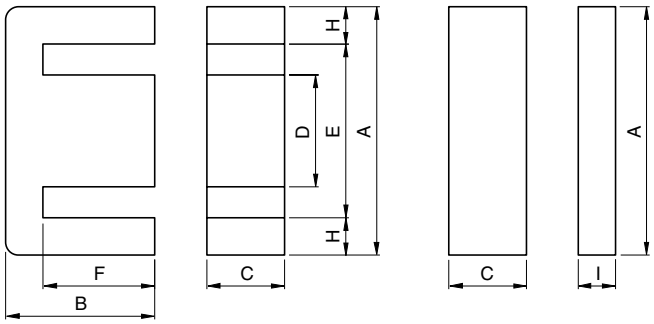
Accessories

F E – 30 – F

- F — Symbol of Accessory
- E – 30 — Size of E core
- F — Type of Accessory

EI CORES



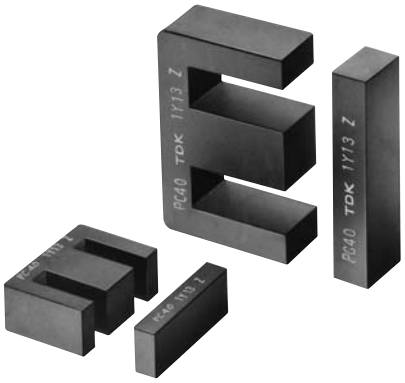


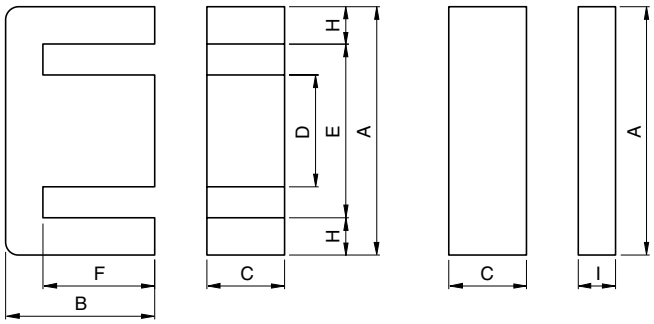
Part No.	JIS	Dimensions in mm							
		A	B	C	D	E min.	F	H	I
PC40EI12.5-Z	JIS FEI 12.5	12.4±0.3	7.4±0.1	4.85±0.15	2.4±0.1	8.8	5.1±0.1	1.6	1.5±0.1
PC40EI16-Z	JIS FEI 16	16.0±0.3	12.2±0.2	4.8±0.2	4.0±0.2	11.6	10.2±0.2	2.05	2.0±0.2
PC40EI19-Z		20.0±0.3	13.55±0.25	5.0±0.2	4.55±0.15	14.3	11.15±0.15	2.75	2.3±0.1
PC40EI22-Z		22.0±0.3	14.55±0.25	5.75±0.25	5.75±0.25	13.0	10.55±0.25	4.5	4.5±0.2
PC40EI22/19/6-Z	JIS FEI 22	22.0±0.4	14.7±0.2	5.75±0.25	5.75±0.25	15.75	10.7±0.2	3.0	4.0±0.2
PC40EI25-Z		25.3±0.5	15.55±0.25	6.75±0.25	6.5±0.3	19.0	12.35±0.25	3.0	2.7±0.2
PC40EI28-Z	JIS FEI 28	$28.0^{+0.7}_{-0.5}$	16.75±0.25	10.6±0.2(E core) 10.7±0.3(I core)	7.2±0.3	18.4	12.25±0.25	4.5	3.5±0.3
PC40EI30-Z	JIS FEI 30	$30.0^{+0.7}_{-0.4}$	21.25±0.25	10.7±0.3	10.7±0.3	19.7	16.25±0.25	5.0	5.5±0.2
PC40EI33/29/13-Z		$33.0^{+0.8}_{-0.5}$	23.75±0.25	12.7±0.3	9.7±0.3	23.4	19.25±0.25	4.45	5.0±0.3
PC40EI35-Z	JIS FEI 35	35.0±0.5	24.35±0.15	10.0±0.3	10.0±0.3	24.5	18.25±0.15	5.0	4.6±0.3

Part No.	Effective parameter				Electrical characteristics				
					AL-value (nH/N²)*		Core loss (W) max.	Wt (g)	Bobbin item
	C1 (mm⁻¹)	Ae (mm²)	ℓe (mm)	Ve (mm³)	Without air gap	With air gap	100kHz, 200mT, 100°C		
PC40EI12.5-Z	1.48	14.4	21.3	308	1200±25%	63±7% 100±10%	0.12	1.9	BE12.5-1110CPFR
PC40EI16-Z	1.75	19.8	34.6	685	1100±25%	80±7% 160±10%	0.31	3.3	BE16-116CPFR BE16-118CPHFR BE16-1110CPNFR
PC40EI19-Z	1.65	24.0	39.6	950	1400±25%	80±7% 160±10%	0.42	5.1	BE19-116CPFR BE19-118CPHFR BE-19-5116
PC40EI22-Z	0.936	42.0	39.3	1650	2400±25%	125±7% 250±10%	0.6	9.8	BE22-1110CPFR BE22-118CPFR BE-22-5116
PC40EI22/19/6-Z	1.13	37.0	41.8	1550	2000±25%	125±7% 250±10%	0.64	8.5	BE22/19/6-118CPFR
PC40EI25-Z	1.15	41.0	47.0	1930	2140±25%	125±7% 250±10%	0.79	9.8	BE25-118CPFR BE-25-5116
PC40EI28-Z	0.56	86.0	48.2	4150	4300±25%	200±5% 400±7%	–1.65	22	BE28-1110CPLFR
PC40EI30-Z	0.522	111	58.0	6440	4690±25%	200±5% 400±7%	3.1	34	BE30-1110CPFR BE30-1112CPFR BE-30-5112
PC40EI33/29/13-Z	0.567	119	67.5	8030	4400±25%	200±5% 400±7%	3.5	41	BE33-1112CPLFR
PC40EI35-Z	0.664	101	67.1	6780	3800±25%	200±5% 400±7%	2.85	36	BE35-1112CPLFR

* *AL-value: 1kHz, 0.5mA, 100Ts*

EI CORES



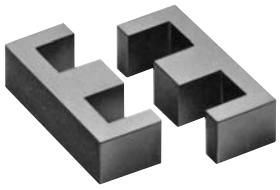


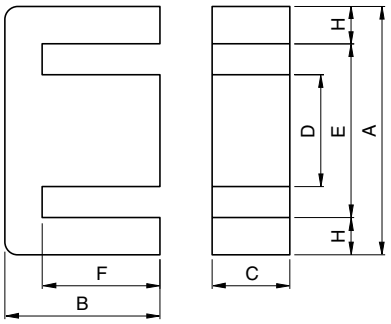
Part No.	JIS	Dimensions in mm							
		A	B	C	D	E min.	F	H	I
PC40EI40-Z	JIS FEI 40	40.0±0.5	27.25±0.25	11.65±0.35	11.65±0.35	27.2	20.25±0.25	6.2	7.5±0.3
PC40EI50-Z	JIS FEI 50	$50.0^{+1.2}_{-0.7}$	33.35±0.35	14.6±0.4	14.6±0.4	33.5	24.75±0.25	7.7	9.0±0.3
PC40EI60-Z	JIS FEI 60	$60.0^{+1.4}_{-0.8}$	35.85±0.35	15.6±0.4	15.6±0.4	43.6	27.85±0.35	7.7	8.5±0.3

Part No.	Effective parameter				Electrical characteristics				
					A_L-value (nH/N²)*		Core loss (W) max.	Wt (g)	Bobbin item
	C_1 (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	Without air gap	With air gap	100kHz, 200mT, 100°C		
PC40EI40-Z	0.520	148	77.0	11400	4860±25%	200±5% 400±7%	4.8	60	BE40-1112CPFR BE40-1112CPNFR BE-40-5112
PC40EI50-Z	0.409	230	94.0	21620	6110±25%	250±5% 500±7%	9.2	115	BE50-1112CPFR BE-50-5112
PC40EI60-Z	0.441	247	109	26900	5670±25%	250±5% 500±7%	12.5	139	BE60-1112CPFR BE-60-5112

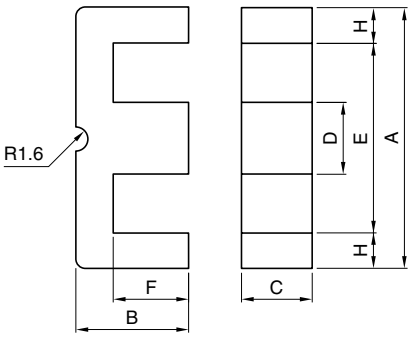
* *A_L-value: 1kHz, 0.5mA, 100Ts*

EE AND EF CORES





Type 1



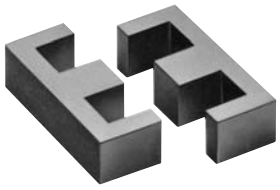
Type 2

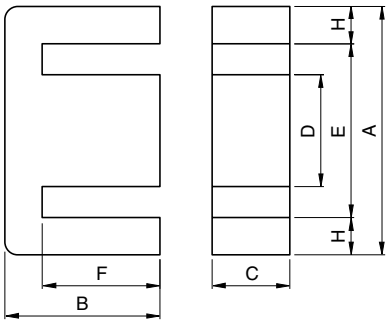
Part No.	U.S. lam. cores, DIN standard JIS	Type	Dimensions in mm						
			A	B	C	D	E min.	F	H
PC40EE8-Z	JIS FEE 8.3	1	8.3±0.2	4.0±0.1	3.6±0.2	1.85±0.15	6.0	3.0±0.1	1.0
PC40EE10/11-Z	JIS FEE 10.2	1	10.2±0.2	5.5±0.1	4.75±0.15	2.45±0.15	7.7	4.20±0.15	1.1
PC40EF12.6-Z	DIN 41985	1	12.7±0.4	6.4±0.1	3.6±0.2	3.65±0.15	8.8	4.65±0.15	1.83
PC40EE13-Z		1	13.0±0.2	6.00±0.15	6.15±0.15	2.75±0.15	10.0	4.6±0.1	1.4
PC40EE16-Z	JIS FEE 16A	1	16.0±0.3	7.15±0.15	4.8±0.2	4.0±0.2	11.7	5.1±0.2	2.0
PC40SEE16-Z		1	16.0±0.3	7.15±0.15	6.8±0.2	3.18±0.18	12.5	5.5±0.1	1.6
PC40EF16-Z	DIN 41985	1	16.1±0.6	8.05±0.15	4.5±0.2	4.55±0.15	11.3	5.9±0.2	2.2
PC40EE19-Z	JIS FEE 19A	1	19.1±0.3	7.95±0.15	5.0±0.2	4.55±0.15	14.2	5.6±0.1	2.3
PC40EE19/16-Z	U.S. EE-187	1	19.29±0.32	8.1±0.18	4.75±0.13	4.75±0.08	14.05	5.715±0.125	2.46
PC40EE20/20/5-Z	DIN 41295	2	20.15±0.55	10.0±0.2	5.1±0.2	5.0±0.2	12.8	6.5±0.2	3.53

Part No.	Effective parameter				Electrical characteristics				
					A_L-value (nH/N²)*		Core loss (W) max.	Wt (g)	Bobbin item
	C_1 (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	Without air gap	With air gap	100kHz, 200mT, 100°C		
PC40EE8-Z	2.75	7.0	19.2	134	610±25%	40±7% 63±10%	0.06	0.7	BE8-116CPHFR
PC40EE10/11-Z	2.16	12.1	26.1	315	850±25%	40±7% 63±10%	0.14	1.5	BE10-118CPSFR
PC40EF12.6-Z	2.28	13.0	29.6	385	810±25%	63±7% 100±10%	0.17	2.0	—
PC40EE13-Z	1.77	17.1	30.2	517	1130±25%	63±7% 100±10%	0.235	2.7	BE13-1110CPSFR
PC40EE16-Z	1.82	19.0	34.5	656	1140±25%	80±7% 160±10%	0.31	3.3	BE16-116CPFR BE16-118CPHFR BE16-1110CPNFR
PC40SEE16-Z	1.69	21.7	36.6	795	1240±25%	80±7% 160±10%	0.37	4.1	BES16-1110CPSFR
PC40EF16-Z	1.87	20.1	37.6	754	1100±25%	63±7% 100±10%	0.32	3.9	—
PC40EE19-Z	1.71	23.0	39.4	906	1250±25%	80±7% 160±10%	0.42	4.8	BE19-116CPFR BE19-118CPHFR BE-19-5116
PC40EE19/16-Z	1.75	22.4	39.1	876	1350±25%	80±7% 160±10%	0.41	4.8	
PC40EE20/20/5-Z	1.38	31.0	43.0	1340	1400±25%	100±7% 160±10%	0.51	7.5	—

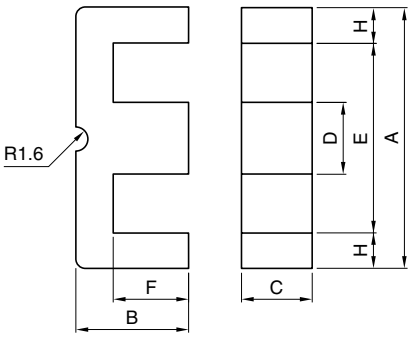
* *A_L-value: 1kHz, 0.5mA, 100Ts*

EE AND EF CORES





Type 1



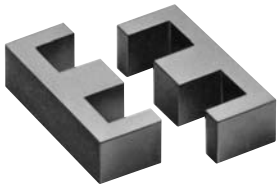
Type 2

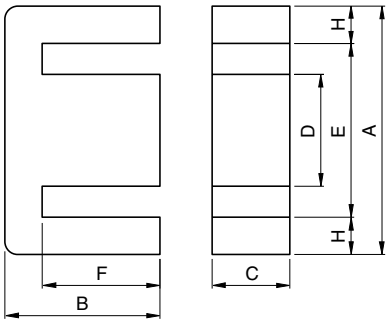
Part No.	U.S. lam. cores, DIN standard JIS	Type	Dimensions in mm						
			A	B	C	D	E min.	F	H
PC40EF20-Z	DIN 41985	1	20.0±0.4	9.9±0.2	5.65±0.25	5.7±0.2	14.1	7.2±0.2	2.8
PC40EE22-Z		1	22.0±0.3	9.35±0.15	5.75±0.25	5.75±0.25	13.0	5.35±0.15	4.3
PC40EE25/19-Z	U.S. EE-24/25	1	25.4±0.5	9.46±0.19	6.29±0.19	6.35±0.25	18.55	6.41±0.19	3.11
PC40EF25-Z	DIN 41985	1	25.05±0.75	12.55±0.25	7.2±0.3	7.25±0.25	17.5	8.95±0.25	3.55
PC40EE25.4-Z	JIS FEE 25.4A	1	25.4±0.76	9.66±0.15	6.35±0.25	6.35±0.25	18.5	6.48±0.15	3.18
PC40EE30-Z	JIS FEE 30A	1	30.0±0.5	13.15±0.15	10.7±0.3	10.7±0.3	19.7	8.15±0.15	5.0
PC40EE30/30/7-Z	DIN 41295	2	30.1±0.7	15.0±0.2	7.05±0.25	6.95±0.25	19.5	9.95±0.25	5.1
PC40EF32-Z	DIN 41985	1	32.1±0.8	16.1±0.3	9.15±0.35	9.2±0.3	22.7	11.6±0.3	4.4
PC40EE35/28B-Z	U.S. EE-375	1	34.6±0.5	14.27±0.37	9.31±0.30	9.4±0.3	25.0	9.78±0.25	4.5
PC40EE35-Z	JIS FEE35B	1	34.54±1.0	14.35±0.35	9.53±0.38	9.39±0.27	24.89	9.71±0.28	4.75

Part No.	Effective parameter				Electrical characteristics				
	C_1 (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	A_L-value (nH/N^2)*		Core loss (W) max. 100kHz, 200mT, 100°C	Wt (g)	Bobbin item
					Without air gap	With air gap			
PC40EF20-Z	1.34	33.5	44.9	1500	1570±25%	100±7% 160±10%	0.69	7.4	—
PC40EE22-Z	0.970	41.0	39.6	1620	2180±25%	125±7% 250±10%	0.61	8.8	BE22-1110CPFR BE22-118CPFR BE-22-5116
PC40EE25/19-Z	1.22	40.0	48.7	1950	2000±25%	100±7% 200±10%	0.86	9.1	—
PC40EF25-Z	1.11	51.8	57.8	2990	2000±25%	100±7% 160±10%	1.40	15	—
PC40EE25.4-Z	1.21	40.3	48.7	1963	2000±25%	125±7% 250±10%	0.90	10	—
PC40EE30-Z	0.529	109.0	57.7	6290	4690±25%	200±5% 400±7%	2.90	32	BE30-1110CPFR BE30-1112CPFR BE-30-5112
PC40EE30/30/7-Z	1.12	59.7	66.9	4000	2100±25%	160±5% 250±7%	1.51	22	—
PC40EF32-Z	0.893	83.2	74.3	6180	2590±25%	160±5% 250±7%	2.90	32	—
PC40EE35/28B-Z	0.819	84.9	69.6	5907	2950±25%	200±5% 400±7%	2.33	28	—
PC40EE35-Z	0.774	89.3	69.2	6179	3170±25%	200±5% 400±7%	3.00	57	—

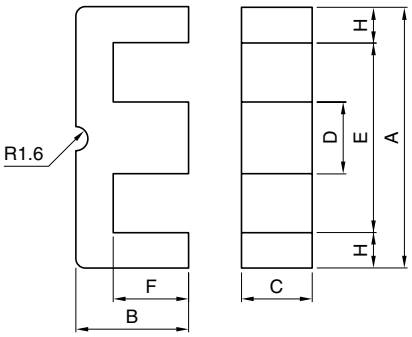
* *A_L-value: 1kHz, 0.5mA, 100Ts*

EE AND EF CORES





Type 1



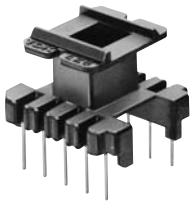
Type 2

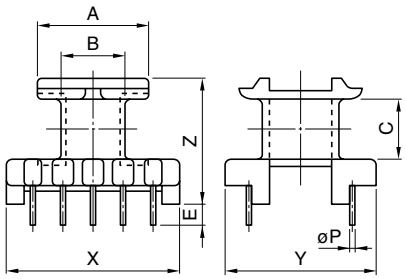
Part No.	U.S. lam. cores, DIN standard JIS		Type	Dimensions in mm						
				A	B	C	D	E min.	F	H
PC40EE40-Z	JIS FEE40A		1	40.0±0.5	17.0±0.3	10.7±0.3	10.7±0.3	27.4	10.25±0.25	6.0
PC40EE41/33C-Z	U.S. EE-21		1	41.07±0.8	16.78±0.4	12.57±0.38	12.64±0.45	28.55	10.38±0.3	6.0
PC40EE42/42/15-Z	DIN 41295	JIS FEE42A	1	42.15±0.85	21.0±0.2	14.95±0.25	11.95±0.25	29.5	15.15±0.35	6.025
PC40EE42/42/20-Z	DIN 41295	JIS FEE42B	1	42.15±0.85	21.0±0.2	19.7±0.3	11.95±0.25	29.5	15.15±0.35	6.025
PC40EE47/39-Z	U.S. EE-625		1	47.12±0.48	19.63±0.2	15.62±0.25	15.62±0.25	31.72	12.2±0.13	7.49
PC40EE50-Z	JIS FEE50A		1	$50.0^{+1.0}_{-0.7}$	21.3±0.3	14.6±0.4	14.6±0.4	34.2	12.75±0.25	7.5
PC40EE55/55/21-Z	DIN 41295	JIS FEE55	1	55.15±1.05	27.5±0.3	20.7±0.3	16.95±0.25	37.5	18.8±0.3	8.53
PC40EE57/47-Z	U.S. EE-75		1	56.57±1.0	23.60±0.23	18.8±0.25	18.80±0.25	38.1	14.63±0.15	9.02
PC40EE60-Z	JIS FEE60A		1	$60.0^{+1.1}_{-0.8}$	22.3±0.3	15.6±0.4	15.6±0.4	43.8	14.05±0.25	7.7
PC40EE50.3/51/6-Z			1	50.3±0.8	25.6±0.25	$6.1^{+0.4}_{-0.2}$	19.9±0.35	29.5	15.9±0.25	10
PC40EE62.3/62/6-Z			1	62.3±1.2	31.0±0.25	$6.1^{+0.4}_{-0.2}$	25.3±0.5	35.9	18.7±0.25	12.6

Part No.	Effective parameter				Electrical characteristics				
					A_L-value (nH/N²)*		Core loss (W) max.	Wt (g)	Bobbin item
	C_1 (mm⁻¹)	Ae (mm²)	ℓe (mm)	Ve (mm³)	Without air gap	With air gap	100kHz, 200mT, 100°C		
PC40EE40-Z	0.606	128	77.3	9890	4150±25%	200±5% 400±7%	4.20	50	BE40-1112CPFR BE40-1112CPNFR BE-40-5112
PC40EE41/33C-Z	0.495	157	77.6	12200	5060±25%	200±5% 400±7%	5.80	64	—
PC40EE42/42/15-Z	0.534	182	97.0	17600	4700±25%	250±5% 400±7%	8.00	80	—
PC40EE42/42/20-Z	0.415	235	97.4	22900	6100±25%	250±5% 400±7%	10.4	116	—
PC40EE47/39-Z	0.374	242	90.6	21930	6660±25%	250±5% 400±7%	9.70	108	—
PC40EE50-Z	0.425	226	95.8	21600	6110±25%	250±5% 400±7%	9.40	116	BE50-1112CPFR BE-50-5112
PC40EE55/55/21-Z	0.348	354	123	43700	7100±25%	250±5% 400±7%	11.0**	234	—
PC40EE57/47-Z	0.297	344	102	35100	8530±25%	250±5% 400±7%	8.5**	190	—
PC40EE60-Z	0.446	247	110	27100	5670±25%	250±5% 500±7%	12.5	135	BE60-1112CPFR BE-60-5112
PC40EE50.3/51/6-Z	0.868	121	105	12700	2900±25%	200±5% 400±7%	5.83	68	BE50.3-1112CPHFR
PC40EE62.3/62/6-Z	0.822	153	126	19300	3100±25%	200±5% 400±7%	8.85	102	BE62.3-1112CPHFR

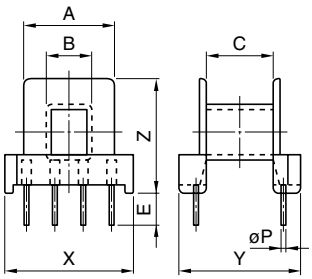
* *A_L-value: 1kHz, 0.5mA, 100Ts*

EE AND EI BOBBINS

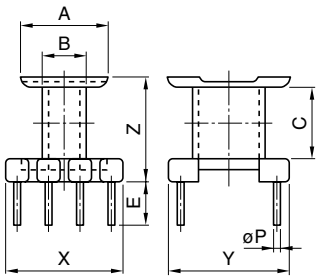




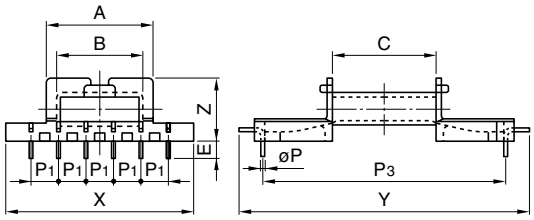
Type 1



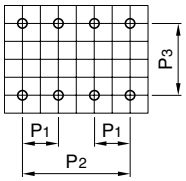
Type 2

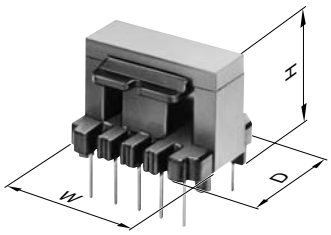


Type 3



Type 4



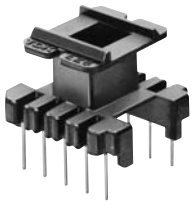


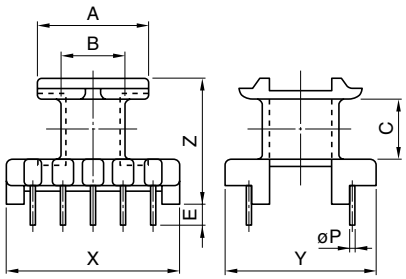
Part No.	Type	Dimensions in mm							
		A	B	C	E	X	Y	Z	t*
BE8-116CPHFR	2	5.75	3.00	4.78	2.70	8.00	8.80	8.40	0.35
BE10-118CPSFR	3	7.2	3.53	6.6	3.85	10.15	10.2	9.0	0.35
BE12.5-1110CPFR	1	8.5	3.58	3.5	3.25	12.35	12.35	8.3	0.325
BE13-1110CPSFR	3	9.95	4.05	7.4	3.7	12.6	12.6	10.4	0.40
BE16-116CPFR	3	11.48	5.15	8.5	3.8	11.48	13.0	11.5	0.375
BE16-118CPHFR	2	11.4	5.15	8.6	4.0	15.0	13.4	13.30	0.325
BE16-1110CPNFR	1	11.35	5.65	8.20	3.8	16.0	13.0	13.90	0.55
BES-16-1110CPSFR	3	12.2	4.55	8.7	5.0	15.9	14.0	11.7	0.45
BE19-116CPFR	3	13.8	5.8	9.1	5.0	13.8	16.5	12.05	0.35
BE19-118CPHFR	2	14.0	6.65	9.0	6.0	20.0	16.2	18.6	0.80

Part No.	Dimensions in mm					Parameter		Wt (g)	Accessory item
	øP (mm)	P_1 (mm)	P_2 (mm)	P_3 (mm)	Terminal pins	W D (mm) H	Aw (mm^2)	ℓ_w (mm)	
BE8-116CPHFR	0.6	2.5	5.0	7.0	6	8.3 8.0 8.0	5.3	19.9	0.26	—
BE10-118CPSFR	0.5	2.6	7.7	8.0	8	10.4 10.2 11.2	12.2	23.8	0.34	—
BE12.5-1110CPFR	0.6	2.5	10.0	7.5	10	12.7 12.5 9.1	8.6	27.2	0.64	—
BE13-1110CPSFR	0.6	2.5	10.0	8.6	10	13.2 12.7 12.3	22.2	31.3	0.63	—
BE16-116CPFR	0.6	3.1	6.2	9.2	6	16.3 13.1 14.6	27.3	32.5	0.63	—
BE16-118CPHFR	0.6	3.0	9.0	11.0	8	16.5 14.6 13.6	26.7	33.1	0.84	—
BE16-1110CPNFR	0.6	3.25	13.0	10.5	10	16.3 13.1 15.6	23.2	33.0	1.2	—
BES-16-1110CPSFR	0.6	3.3	13.2	11.0	10	16.3 14.1 16.3	33.1	37.1	1.0	—
BE19-116CPFR	□0.5	4.0	8.0	12.5	6	20.3 16.7 16.2	36.4	36.8	0.95	—
BE19-118CPHFR	0.8	5.08	15.24	12.7	8	20.3 16.2 18.8	33.1	39.1	2.4	—

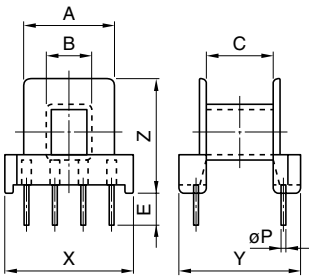
UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

EE AND EI BOBBINS

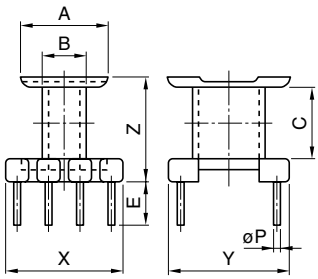




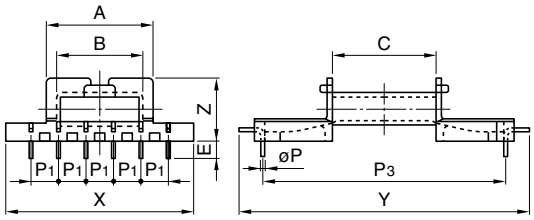
Type 1



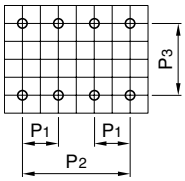
Type 2

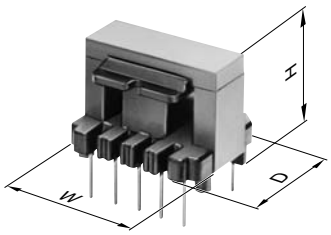


Type 3



Type 4





Part No.	Type	Dimensions in mm							
		A	B	C	E	X	Y	Z	t*
BE22-118CPFR	1	12.5	7.9	8.45	6.0	22.0	17.0	17.3	0.85
BE22/19/6-118CPFR	1	15.2	7.9	8.45	6.0	22.0	17.0	17.3	0.85
BE25-118CPFR	1	18.1	9.1	9.8	6.0	25.0	18.0	19.3	0.90
BE28-1110CPLFR	1	18.1	9.9	9.6	7.0	28.0	25.0	20.6	0.90
BE30-1110CPFR	1	19.2	13.1	13.7	7.0	30.0	25.0	24.65	0.85
BE30-1112CPFR	1	19.4	13.1	13.7	7.0	30.0	25.0	24.65	0.70
BE33-1112CPLFR	1	23.1	12.4	16.6	7.0	33.0	28.0	28.6	0.90
BE35-1112CPLFR	1	24.0	12.7	15.7	7.0	35.0	25.0	28.7	0.90
BE40-1112CPFR	1	26.5	14.0	17.3	7.0	36.0	30.0	30.5	0.80
BE40-1112CPNFR	1	26.5	14.0	17.3	7.0	36.0	30.0	30.5	0.80

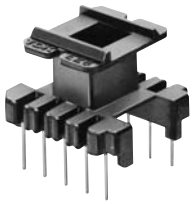
Part No.	Dimensions in mm						Parameter		Wt (g)	Accessory item
	øP (mm)	P_1 (mm)	P_2 (mm)	P_3 (mm)	Terminal pins	W D (mm) H	Aw (mm^2)	ℓw (mm)		
BE22-118CPFR	0.8	5.0	15.0	12.5	8	22.3 17.1 20.1	20.0	38.6	2.3	—
BE22/19/6-118CPFR	0.8	5.0	15.0	12.5	8	22.4 17.1 19.1	31.5	42.8	2.7	—
BE25-118CPFR	0.8	5.0	15.0	12.5	8	25.8 18.1 20.5	42.5	49.4	3.5	—
BE28-1110CPLFR	0.8	5.0	20.0	17.5	10	28.5 25.1 22.7	39.4	59.1	5.0	—
BE30-1110CPFR	0.8	5.0	20.0	20.0	10	30.4 25.1 28.6	44.5	61.0	4.9	FE-30-F FE-30-G
BE30-1112CPFR	0.8	5.0	25.0	20.0	12	30.4 25.1 28.6	43.2	58.0	6.2	
BE33-1112CPLFR	0.8	5.0	25.0	22.5	12	33.5 28.1 31.2	88.8	72.3	6.8	—
BE35-1112CPLFR	0.8	5.0	25.0	20.0	12	35.5 25.1 30.9	88.7	68.5	7.7	—
BE40-1112CPFR	1.0	5.0	25.0	25.0	12	40.5 30.2 35.8	108.0	76.0	9.7	FE-40-F FE-40-G
BE40-1112CPNFR	1.0	5.0	25.0	22.5	12	40.5 30.2 35.7	108.1	75.6	9.8	

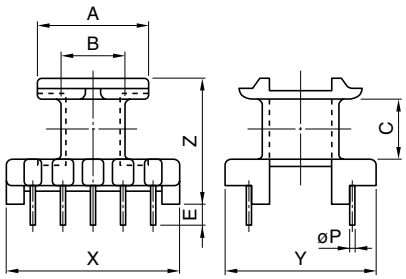
UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)

Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".

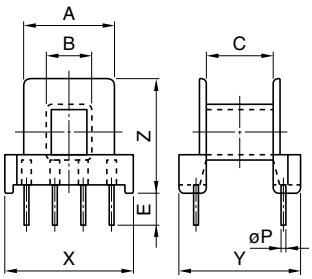
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

EE AND EI BOBBINS

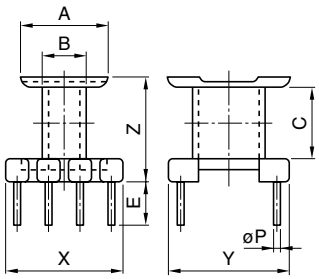




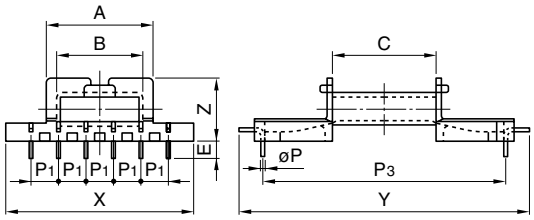
Type 1



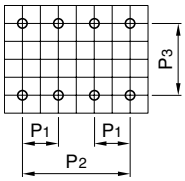
Type 2

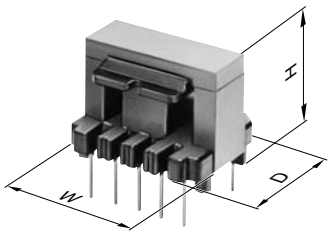


Type 3



Type 4





Part No.	Type	Dimensions in mm							
		A	**B**	**C**	**E**	**X**	**Y**	**Z**	**t***
BE50-1112CPFR	1	33.2	17.2	21.3	9.0	50.0	36.0	36.65	0.85
BE60-1112CPFR	1	43.3	18.60	23.8	10.0	56.0	45.0	38.9	0.95
BE50.3-1112CPHFR	4	29.1	22.3	28.25	4.5	51.0	74.79	16.10	0.75
BE62.3-1112CPHFR	4	35.1	28.3	33.85	4.5	63.20	85.6	16.10	0.75

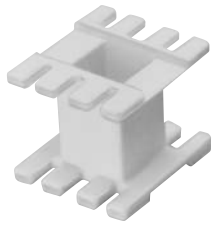
Part No.	Dimensions in mm						Parameter		Wt (g)	Accessory item
	øP (mm)	**P1 (mm)**	**P2 (mm)**	**P3 (mm)**	**Terminal pins**	**W D (mm) H**	**Aw (mm²)**	**ℓw (mm)**		
BE50-1112CPFR	1.0	7.5	37.5	27.5	12	50.7 36.2 43.6	170.0	94.0	17	FE-50-F FE-50-G
BE60-1112CPFR	1.0	7.5	37.5	35.0	12	50.8 45.2 45.1	294.0	113.0	29	FE-60-F FE-60-G
BE50.3-1112CPHFR	0.9	7.5	37.5	60	12	52 77 16.2	96.05	76	16	—
BE62.3-1112CPHFR	0.9	7.5	37.5	72.5	12	64 88 16.2	115.09	88	22	—

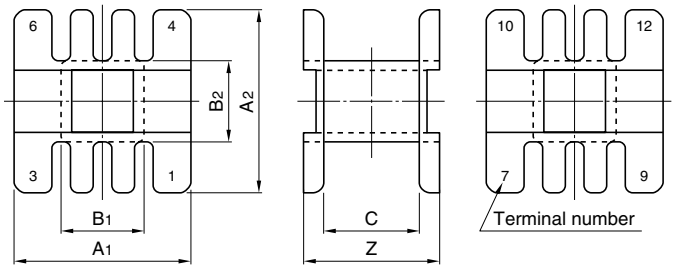
UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)

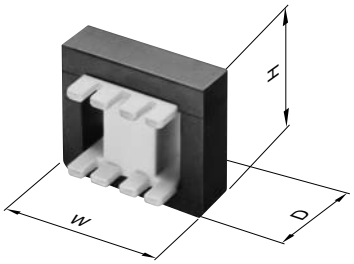
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".

* *Minimum thickness of bobbin inside which core is placed, including flanges.*

EE AND EI BOBBINS





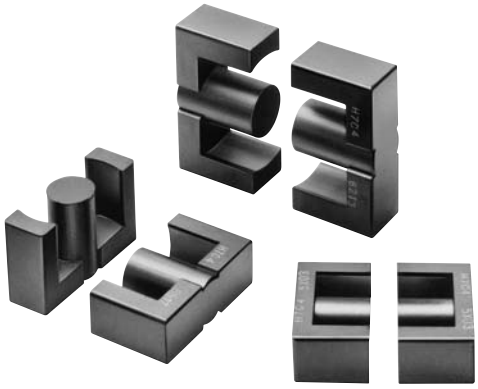


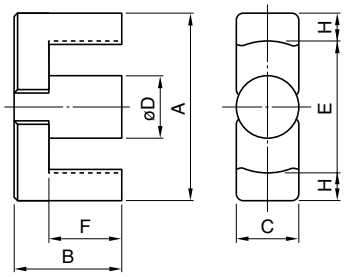
Part No.	Dimensions in mm							
	A_1	**A_2**	**B_1**	**B_2**	**C**	**Z**	**t***	**W D (mm) H**
BE-19-5116	13.7	14.8	6.4	7.15	9.33	11.93	0.60	20.3 14.9 16.2
BE-22-5116	12.53	13.0	7.7	8.0	8.68	11.28	0.575	22.3 13.1 19.5
BE-25-5116	18.1	19.1	8.7	9.2	10.13	14.6	0.725	25.8 19.2 18.7
BE-30-5112	18.85	20.8	13.0	13.0	13.95	18.5	0.60	30.4 21.1 27.2
BE-40-5112	26.35	29.1	14.4	15.40	17.6	23.55	0.80	40.5 29.4 35.3
BE-50-5112	32.75	35.55	17.4	18.40	22.1	30.1	0.80	50.7 35.8 43.0
BE-60-5112	42.75	45.75	19.5	20.50	24.1	34.1	1.30	60.8 46.0 45.0

Part No.	Parameter				Accessory item
	Aw (mm^2)	**ℓw (mm)**	**Wt (g)**	**Material**	
BE-19-5116	35.7	37.9	0.55	6-Nylon	
BE-22-5116	21.7	38.2	0.45	6-Nylon	
BE-25-5116	47.6	50.6	1.3	6-Nylon	
BE-30-5112	47.6	66.0	1.5	6-Nylon	FE-30-F FE-30-G
BE-40-5112	110.0	85.0	3.8	6-Nylon	FE-40-F FE-40-G
BE-50-5112	178.0	100.0	6.6	6-Nylon	FE-50-F FE-50-G
BE-60-5112	289.0	128.0	15	6-Nylon	FE-60-F FE-60-G

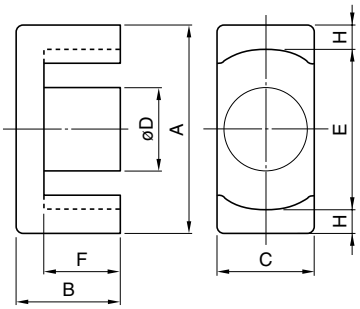
UL Grade: 94V-0
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

EER CORES





Type 1



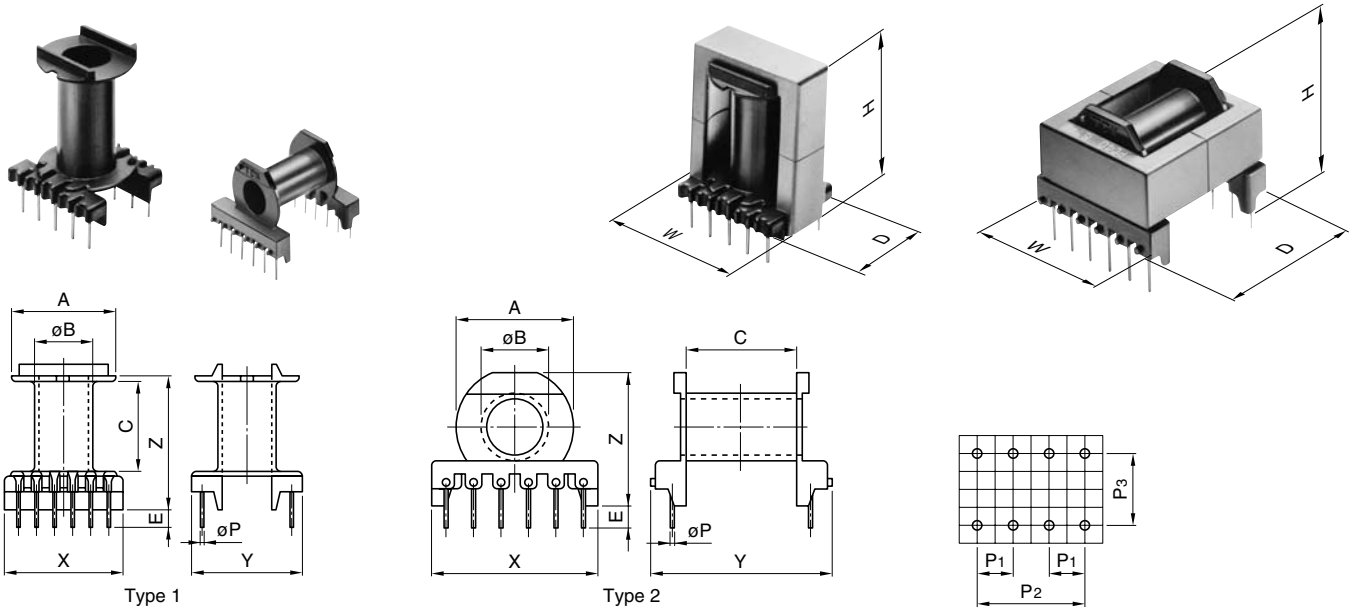
Type 2

Part No.	U.S. lam. cores, DIN standard JIS	Type	Dimensions in mm						
			A	B	C	øD	E min.	F	H
PC40EER25.5-Z	JIS FEER25.5A	1	25.5±0.5	9.3±0.2	7.5±0.2	7.5±0.15	19.8	6.2±0.2	2.6
PC40EER28-Z	JIS FEER28.5A	2	28.55±0.55	14.0±0.2	11.4±0.25	9.9±0.25	21.2	9.65±0.25	3.4
PC40EER28L-Z	JIS FEER28.5B	2	28.55±0.55	16.9±0.25	11.4±0.25	9.9±0.25	21.2	12.53±0.28	3.4
PC40EER35-Z	JIS FEER35A	1	35.0±0.5	20.7±0.2	11.3±0.2	11.3±0.15	25.6	14.7±0.3	4.43
PC40EER40-Z		1	40.0±0.5	22.4±0.2	13.3±0.25	13.3±0.25	29.0	15.4±0.3	5.28
PC40EER42-Z	JIS FEER42	1	42.0±0.6	22.4±0.2	15.5±0.25	15.5±0.25	29.4	15.4±0.3	6.0
PC40EER42/42/20-Z		2	42.15±0.65	21.2±0.2	19.60±0.4	17.3±0.25	31.8	15.25±0.25	4.93
PC40EER49-Z		1	49.0±0.8	19.0±0.3	17.2±0.4	17.2±0.25	36.4	12.4±0.2	6.0

Part No.	Effective parameter				Electrical characteristics				
					AL-value (nH/N²)*		Core loss (W) max.	Wt (g)	Bobbin item
	C_1 (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	Without air gap	With air gap	100kHz, 200mT, 100°C		
PC40EER25.5-Z	1.08	44.8	48.2	2160	1920±25%	100±5% 200±7%	0.98	11	BEER25.5-118CPFR
PC40EER28-Z	0.780	82.1	64.0	5250	2870±25%	200±5% 400±7%	2.30	28	BEER28-1110CPFR BEER28-1112CPHFR
PC40EER28L-Z	0.928	81.4	75.5	6150	2520±25%	160±5% 315±7%	2.70	33	BEER28L-1110CPFR BEER28L-1112CPHFR
PC40EER35-Z	0.849	107	90.8	9720	2770±25%	200±5% 400±7%	4.20	52	BEER35-1112CPFR BEER35-1116CPHFR
PC40EER40-Z	0.658	149	98.0	14600	3620±25%	200±5% 400±7%	6.30	78	BEER40-1112CPFR BEER40-1116CPHFR
PC40EER42-Z	0.509	194	98.8	19200	4690±25%	250±5% 500±7%	8.60	102	BEER42-1114CPFR BEER42-1116CPHFR
PC40EER42/42/20-Z	0.411	240	98.6	23700	5340±25%	250±5% 500±7%	10.7	116	BEER42/20-1112CPFR
PC40EER49-Z	0.395	231	91.3	21100	6250±25%	250±5% 500±7%	5.4**	110	BEER49-1118CPFR

* *AL-value: 1kHz, 0.5mA, 100Ts*
** *Core loss: 100kHz, 150mT, 100°C*

EER BOBBINS

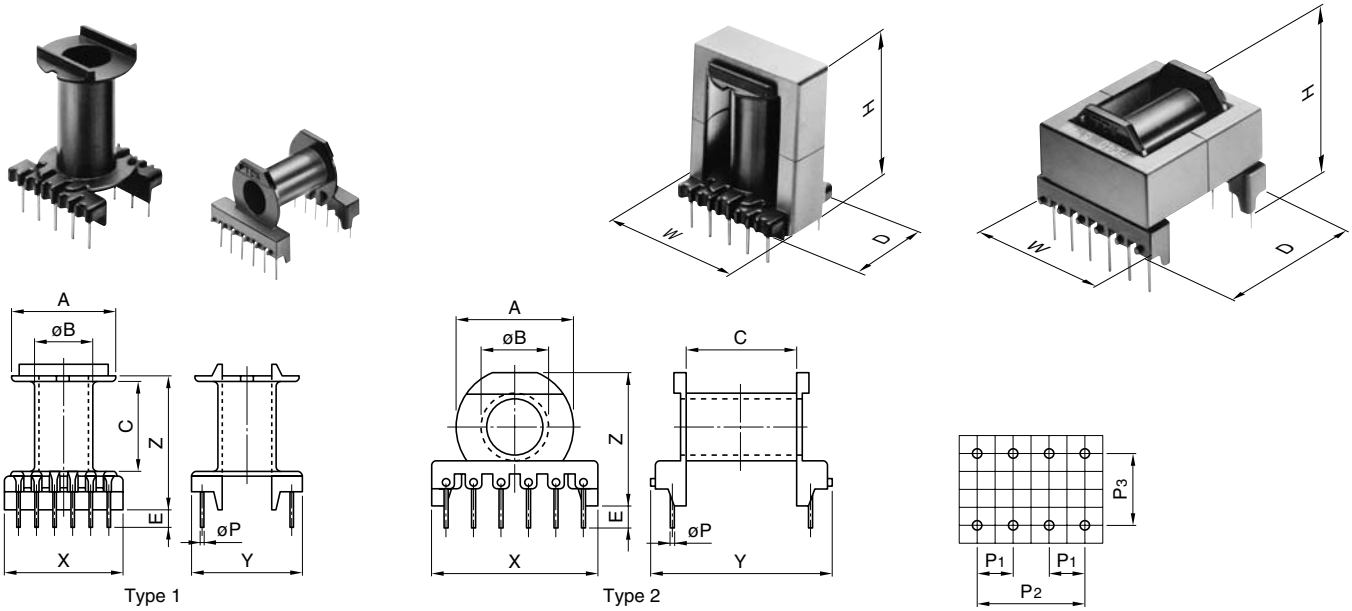


Part No.	Type	Dimensions in mm							
		A	øB	C	E	X	Y	Z	t*
BEER25.5-118CPFR	1	19.53	9.9	10.05	4.5	22.0	19.6	16.95	0.95
BEER28-1110CPFR	1	20.9	12.3	16.7	4.5	24.8	23.0	24.00	0.95
BEER28L-1110CPFR	1	20.9	12.3	22.4	4.5	24.8	23.0	29.70	0.95
BEER35-1112CPFR	1	25.4	13.7	26.1	5.5	30.0	28.5	37.50	0.98
BEER40-1112CPFR	1	28.7	15.8	27.5	5.0	32.0	30.0	38.90	0.98
BEER42-1114CPFR	1	29.1	17.95	27.5	5.0	38.0	30.0	39.90	0.95
BEER42/20-1112CPFR	1	31.5	19.85	27.3	5.0	43.5	37.0	39.70	0.95

Part No.	Dimensions in mm					Parameter			Wt (g)
	øP (mm)	P_1 (mm)	P_2 (mm)	P_3 (mm)	Terminal pins	W D (mm) H	Aw (mm^2)	ℓ_w (mm)	
BEER25.5-118CPFR	0.8	5.0	15	12.5	8	26 20 21	48.4	46.2	2.7
BEER28-1110CPFR	0.8	5.0	20	17.5	10	29 23 29	71.8	52.2	3.5
BEER28L-1110CPFR	0.8	5.0	20	17.5	10	29 23 35	96.3	52.2	3.9
BEER35-1112CPFR	1.0	5.0	25	22.5	12	36 29 44	152.7	61.4	7.7
BEER40-1112CPFR	1.0	5.0	25	25	12	41 30 46	178.8	69.9	8.9
BEER42-1114CPFR	1.0	5.0	30	25	14	43 30 47	153.3	73.9	9.8
BEER42/20-1112CPFR	1.0	7.5	37.5	30	12	43 37 46	159.7	80.6	12

UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

EER BOBBINS

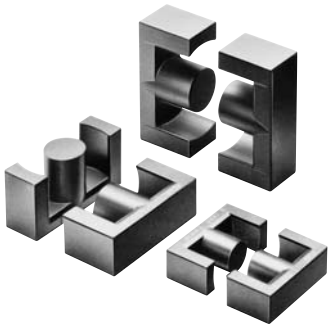


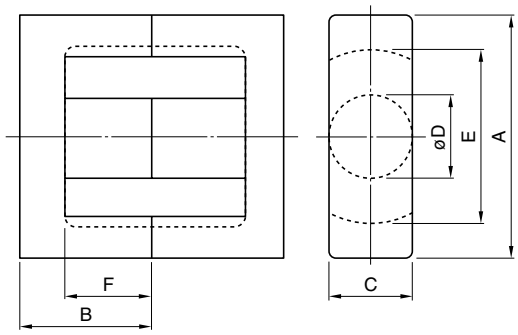
Part No.	Type	Dimensions in mm							
		A	øB	C	E	X	Y	Z	t*
BEER49-1118CPFR	1	35.95	20.3	21.45	4.5	49.0	37.0	34.95	1.05
BEER28-1112CPHFR	2	20.9	12.0	16.1	5.0	30.0	31.3	25.0	0.83
BEER28L-1112CPHFR	2	20.9	12.0	21.8	5.0	30.0	37.0	25.0	0.83
BEER35-1116CPHFR	2	25.2	13.6	26.4	4.5	40.0	45.5	28.95	0.93
BEER40-1116CPHFR	2	28.6	15.7	27.5	4.2	40.0	44.0	31.75	0.93
BEER42-1116CPHFR	2	29.0	17.90	27.3	5.0	40.15	44.25	34.5	0.93

Part No.	Dimensions in mm					Parameter			Wt (g)
	øP (mm)	P_1 (mm)	P_2 (mm)	P_3 (mm)	Terminal pins	W D (mm) H	Aw (mm^2)	ℓw (mm)	
BEER49-1118CPFR	0.8	5.0	40	30	18	50 37 43	167.8	88.4	15
BEER28-1112CPHFR	0.8	5.0	25	25	12	31 32 26	71.6	51.6	5.2
BEER28L-1112CPHFR	0.8	5.0	25	30	12	31 38 26	97.0	51.7	5.5
BEER35-1116CPHFR	□0.75	5.0	35	35	16	41 46 31	154.4	60.8	11
BEER40-1116CPHFR	1.0	5.0	35	35	16	41 45 32	170.6	69.9	11
BEER42-1116CPHFR	1.0	5.0	35	35	16	43 46 35	148.5	73.8	12

UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

ETD CORES



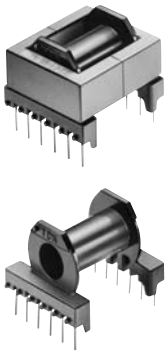


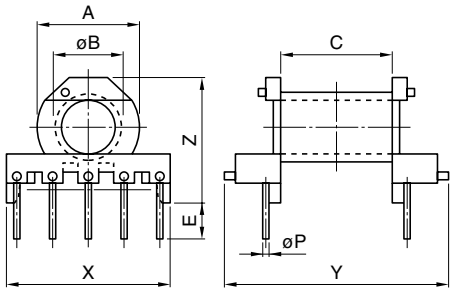
Part No.	JIS	Dimensions in mm					
		A	B	C	øD	E	F
PC40ETD19-Z		19.6±0.5	13.65±0.15	7.4±0.2	7.4±0.2	14.9±0.5	9.4±0.2
PC40ETD24-Z		24.4±0.6	14.45±0.15	8.5±0.4	8.5±0.2	18.6±0.6	10.1±0.2
PC40ETD29-Z		29.8±0.8	15.80±0.15	9.5±0.3	9.5±0.3	22.7±0.7	11.0±0.3
PC40ETD34-Z	JIS FEER 34.2	34.2±0.8	17.3±0.2	10.88±0.38	10.8±0.3	26.3±0.7	12.1±0.3
PC40ETD39-Z	JIS FEER 39.1	39.1±0.9	19.8±0.2	12.58±0.38	12.5±0.3	30.1±0.8	14.6±0.4
PC40ETD44-Z	JIS FEER 44	44.0±1.0	22.3±0.2	14.9±0.5	14.8±0.4	33.3±0.8	16.5±0.4
PC40ETD49-Z	JIS FEER 48.7	48.7±1.1	24.7±0.2	16.4±0.5	16.3±0.4	37.0±0.9	18.1±0.4

Part No.	Effective parameter				Electrical characteristics				
					AL-value (nH/N²)*		Core loss (W) max.	Wt (g)	Bobbin item
	C1 (mm⁻¹)	Ae (mm²)	ℓe (mm)	Ve (mm³)	Without air gap	With air gap	100kHz, 200mT, 100°C		
PC40ETD19-Z	1.32	41.3	54.6	2260	1720±25%	80±5% 160±7%	1.1	14	BETD19-1111CPHFR
PC40ETD24-Z	1.100	56.3	61.9	3480	2125±25%	100±5% 200±7%	1.6	20	BETD24-1112CPHFR
PC40ETD29-Z	0.959	73.6	70.6	5200	2500±25%	200±5% 400±10%	2.4	28	—
PC40ETD34-Z	0.810	97.1	78.6	7630	2780±25%	200±5% 400±7%	3.31	40	—
PC40ETD39-Z	0.737	125	92.1	11500	3150±25%	200±5% 400±7%	5.3	60	—
PC40ETD44-Z	0.589	175	103	18000	4000±25%	250±5% 400±7%	8.3	94	—
PC40ETD49-Z	0.535	213	114	24300	4440±25%	250±5% 400±7%	11.2	124	—

* *AL-value: 1kHz, 0.5mA, 100Ts*

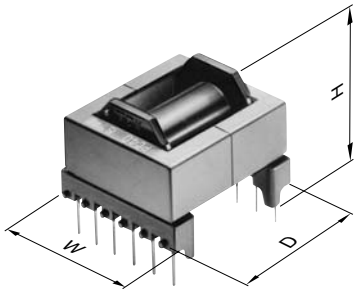
ETD BOBBINS





Bobbin-core assembly dimensions

ETD cores

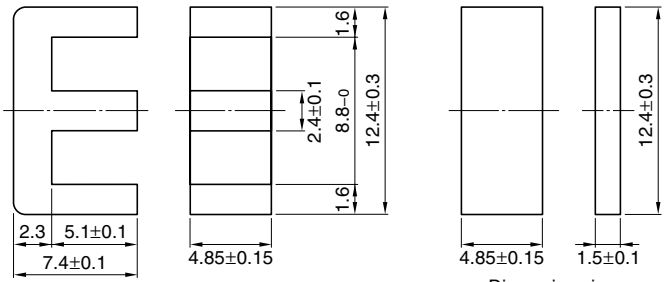


Part No.	Dimensions in mm							
	øA	**øB**	**C**	**E**	**X**	**Y**	**Z**	**t***
BETD19-1111CPHFR	14.0	9.7	16.0	5.0	23.4	31.0	18.15	0.80
BETD24-1112CPHFR	17.5	10.9	17.2	5.0	29.0	33.6	21.65	0.80

Part No.	Dimensions in mm						Parameter		**Wt (g)**
	øP (mm)	**P1 (mm)**	**P2 (mm)**	**P3 (mm)**	**Terminal pins**	**W D (mm) H**	**Aw (mm^2)**	**ℓw (mm)**	
BETD19-1111CPHFR	0.8	5.08	20.32	20.32	10	23.55 31.0 18.15	37.3	33.2	3.3
BETD24-1112CPHFR	0.8	5.08	25.4	22.86	12	29.0 33.6 21.65	44.7	55.5	4.8

UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

EI Series EI12.5 Cores(JIS FEI 12.5)



Dimensions in mm

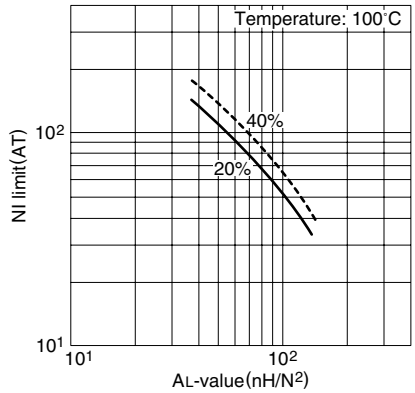
Parameter

Core factor	C1	mm^{-1}	1.48
Effective magnetic path length	ℓe	mm	21.3
Effective cross-sectional area	Ae	mm^2	14.4
Effective core volume	Ve	mm^3	308
Cross-sectional center leg area	Acp	mm^2	11.6
Minimum cross-sectional area	Acp min.	mm^2	10.8
Cross-sectional winding area of core	Acw	mm^2	17.3
Weight (approx.)		g	1.9

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI12.5-Z	1200±25% (1kHz, 0.5mA)* 2120 min. (100kHz, 200mT)	0.12 max.	8.8W (100kHz)

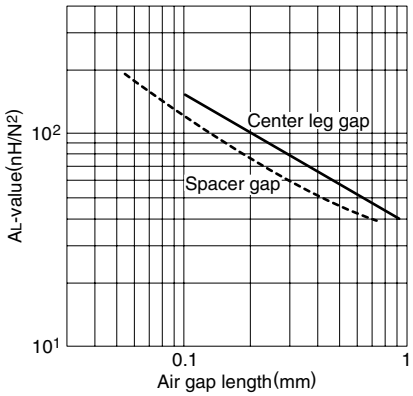
* *Coil: ø0.2 2UEW 100Ts*

NI limit vs. AL-value for PC40EI12.5 gapped core (Typical)



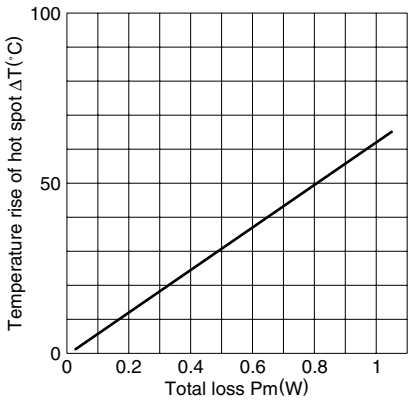
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI12.5 core (Typical)

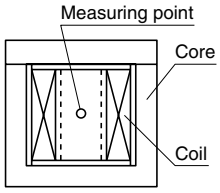


Measuring conditions • Coil: ø0.2 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

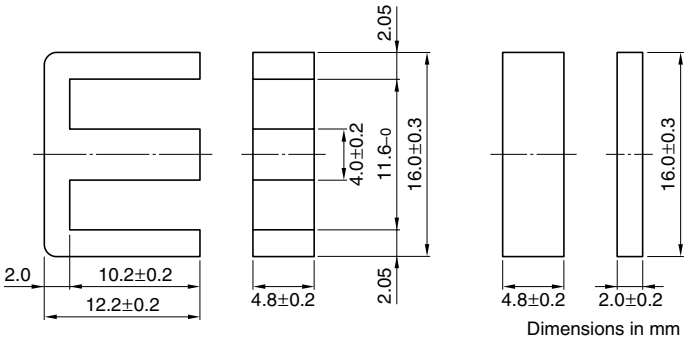
Temperature rise vs. Total loss for EI12.5 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI16 Cores(JIS FEI 16)



Dimensions in mm

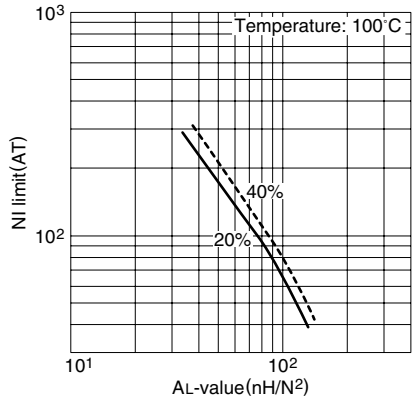
Parameter

Core factor	C1	mm^{-1}	1.75
Effective magnetic path length	ℓe	mm	34.6
Effective cross-sectional area	Ae	mm^2	19.8
Effective core volume	Ve	mm^3	685
Cross-sectional center leg area	Acp	mm^2	19.2
Minimum cross-sectional area	Acp min.	mm^2	17.5
Cross-sectional winding area of core	Acw	mm^2	40.3
Weight (approx.)		g	3.3

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI16-Z	1100±25% (1kHz, 0.5mA)* 1750 min. (100kHz, 200mT)	0.31 max.	29W (100kHz)

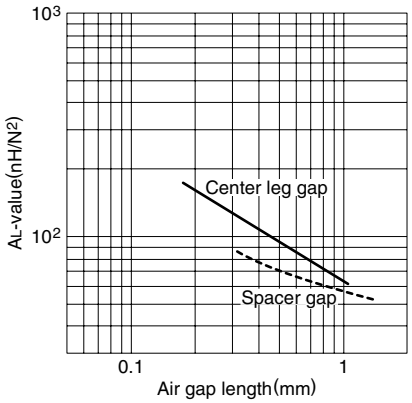
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EI16 gapped core (Typical)



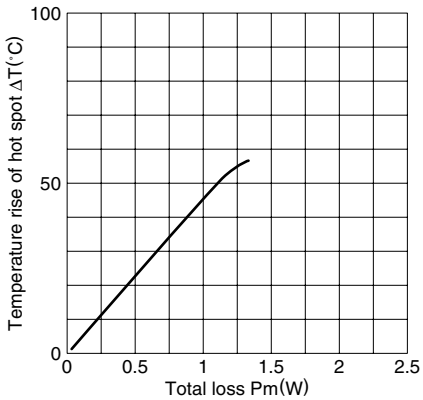
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI16 core (Typical)

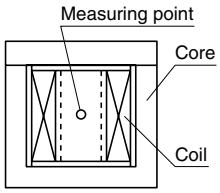


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

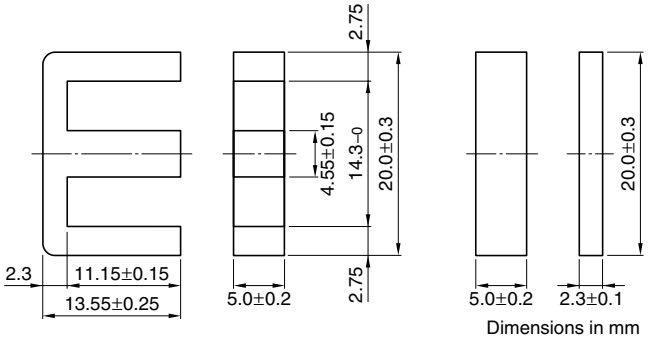
Temperature rise vs. Total loss for EI16 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI19 Cores



Dimensions in mm

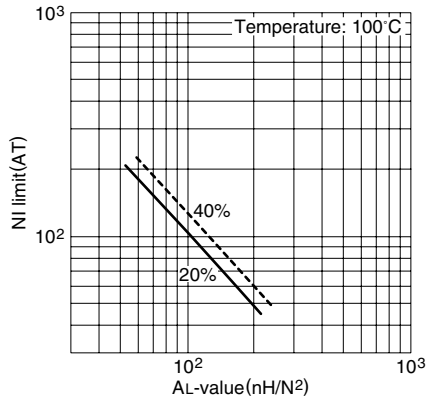
Parameter

Core factor	C1	mm^{-1}	1.65
Effective magnetic path length	ℓe	mm	39.6
Effective cross-sectional area	Ae	mm^2	24.0
Effective core volume	Ve	mm^3	950
Cross-sectional center leg area	Acp	mm^2	22.8
Minimum cross-sectional area	Acp min.	mm^2	21.1
Cross-sectional winding area of core	Acw	mm^2	55.5
Weight (approx.)		g	5.1

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI19-Z	1400±25% (1kHz, 0.5mA)* 1830 min. (100kHz, 200mT)	0.42 max.	40W (100kHz)

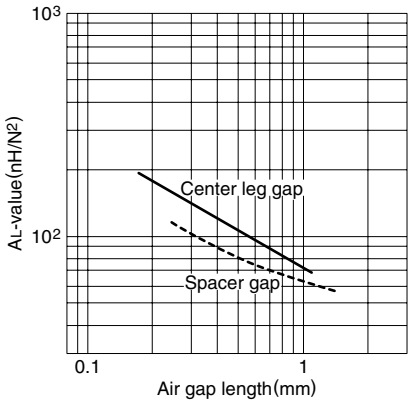
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EI19 gapped core (Typical)



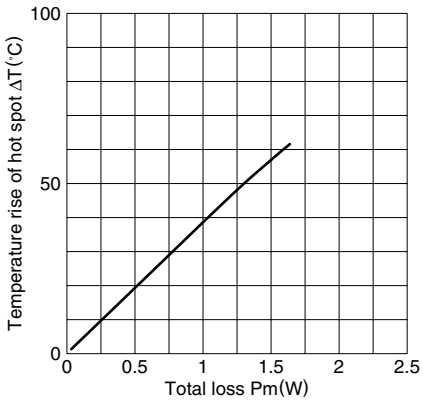
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI19 core (Typical)

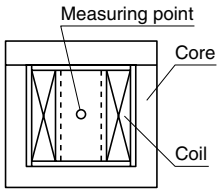


Measuring conditions • *Coil: ø0.23 2UEW 100Ts*
• *Frequency: 1kHz*
• *Level: 0.5mA*

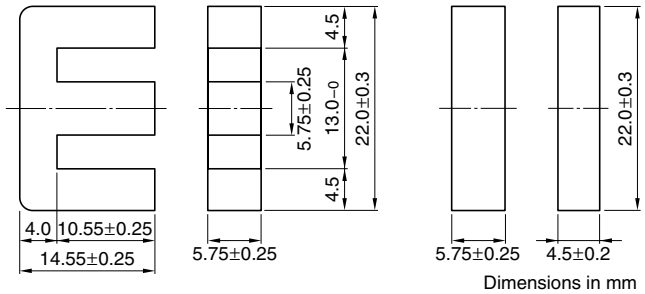
Temperature rise vs. Total loss for EI19 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI22 Cores



Dimensions in mm

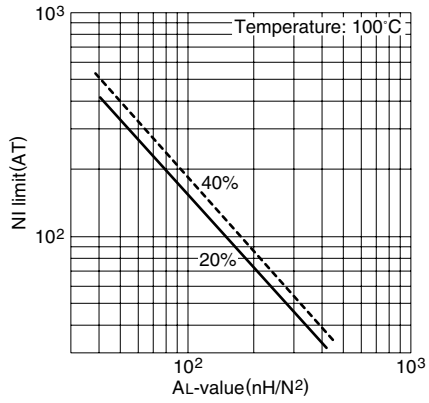
Parameter

Core factor	C1	mm^{-1}	0.936
Effective magnetic path length	ℓe	mm	39.3
Effective cross-sectional area	Ae	mm^2	42.0
Effective core volume	Ve	mm^3	1650
Cross-sectional center leg area	Acp	mm^2	33.1
Minimum cross-sectional area	Acp min.	mm^2	30.3
Cross-sectional winding area of core	Acw	mm^2	38.2
Weight (approx.)		g	9.8

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI22-Z	2400±25% (1kHz, 0.5mA)* 3360 min. (100kHz, 200mT)	0.60 max.	33W (100kHz)

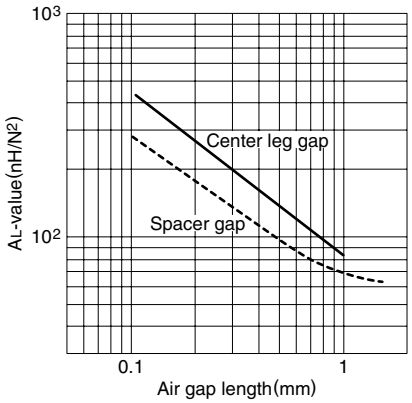
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EI22 gapped core (Typical)



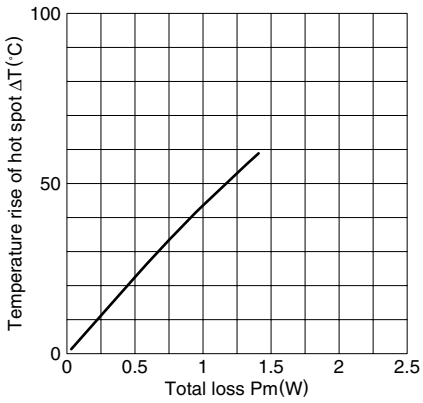
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI22 core (Typical)

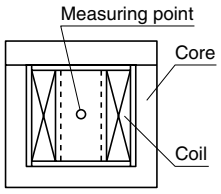


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

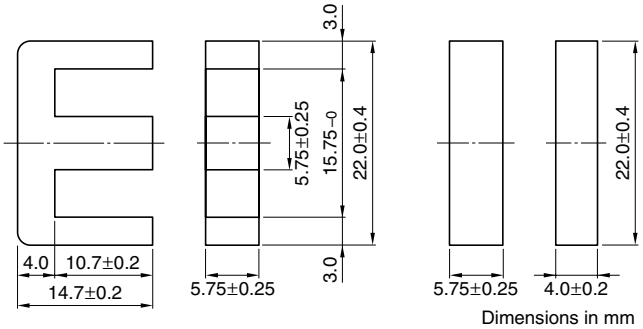
Temperature rise vs. Total loss for EI22 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI22/19/6 Cores(JIS FEI 22)



Dimensions in mm

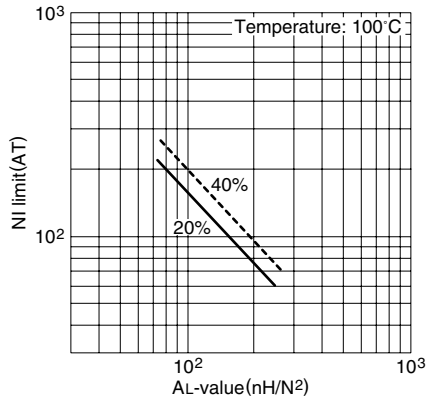
Parameter

Core factor	C1	mm^{-1}	1.13
Effective magnetic path length	ℓe	mm	41.8
Effective cross-sectional area	Ae	mm^2	37.0
Effective core volume	Ve	mm^3	1550
Cross-sectional center leg area	Acp	mm^2	33.1
Minimum cross-sectional area	Acp min.	mm^2	30.3
Cross-sectional winding area of core	Acw	mm^2	54.8
Weight (approx.)		g	8.5

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI22/19/6-Z	2000±25% (1kHz, 0.5mA)* 2780 min. (100kHz, 200mT)	0.64 max.	48W (100kHz)

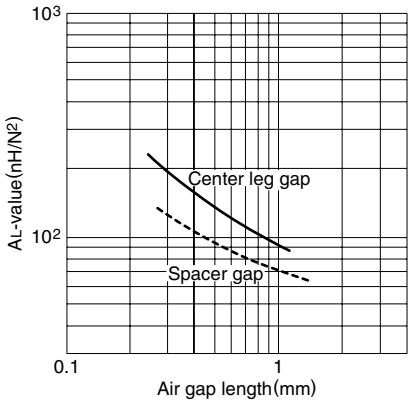
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EI22/19/6 gapped core (Typical)



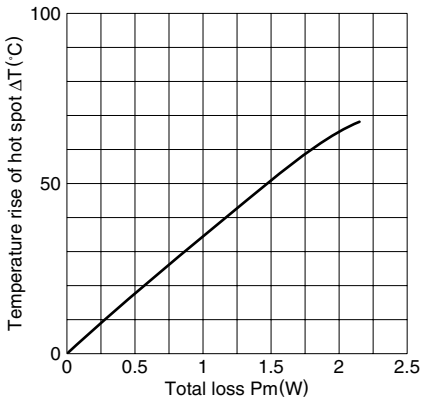
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI22/19/6 core (Typical)

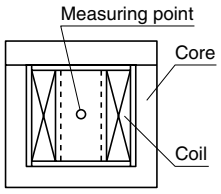


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

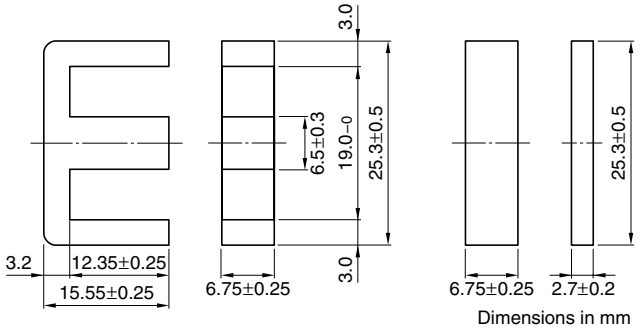
Temperature rise vs. Total loss for EI22/19/6 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI25 Cores



Dimensions in mm

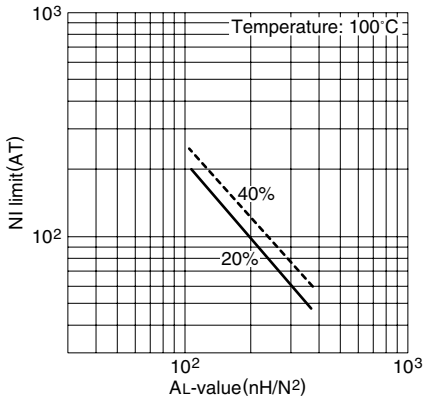
Parameter

Core factor	C1	mm^{-1}	1.15
Effective magnetic path length	ℓe	mm	47.0
Effective cross-sectional area	Ae	mm^2	41.0
Effective core volume	Ve	mm^3	1930
Cross-sectional center leg area	Acp	mm^2	43.9
Minimum cross-sectional area	Acp min.	mm^2	40.3
Cross-sectional winding area of core	Acw	mm^2	77.2
Weight (approx.)		g	9.8

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI25-Z	2140±25% (1kHz, 0.5mA)* 2950 min. (100kHz, 200mT)	0.79 max.	68W (100kHz)

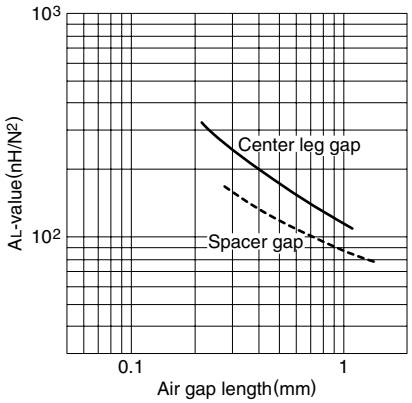
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI25 gapped core (Typical)



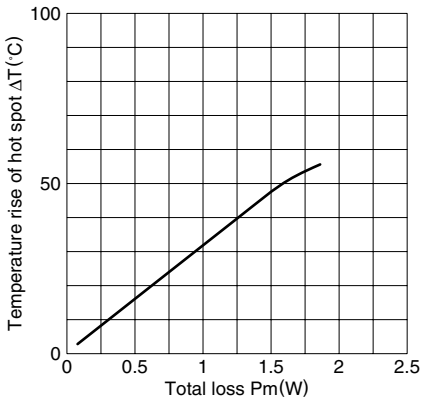
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI25 core (Typical)

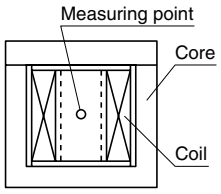


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

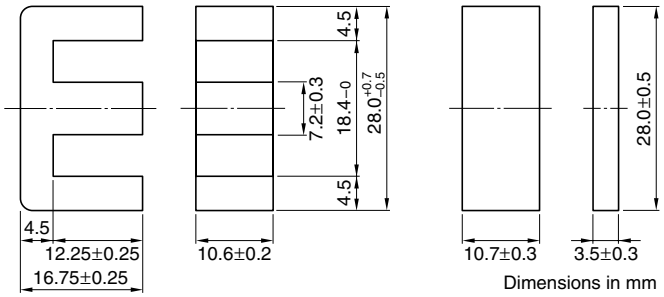
Temperature rise vs. Total loss for EI25 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI28 Cores(JIS FEI 28)



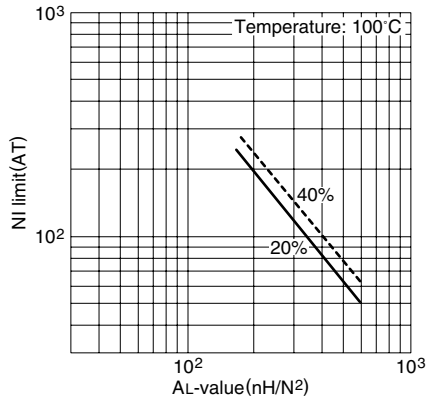
Parameter

Core factor	C1	mm^{-1}	0.560
Effective magnetic path length	ℓe	mm	48.2
Effective cross-sectional area	Ae	mm^2	86.0
Effective core volume	Ve	mm^3	4150
Cross-sectional center leg area	Acp	mm^2	76.3
Minimum cross-sectional area	Acp min.	mm^2	71.8
Cross-sectional winding area of core	Acw	mm^2	69.8
Weight (approx.)		g	22

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI28-Z	4300±25% (1kHz, 0.5mA)* 6060 min. (100kHz, 200mT)	1.65 max.	107W (100kHz)

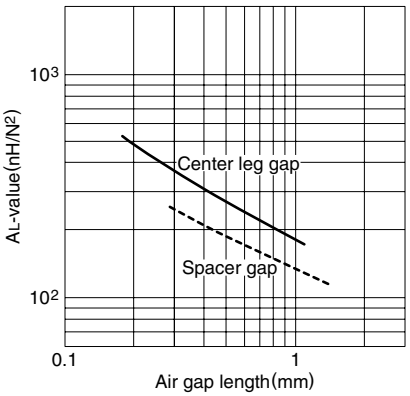
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI28 gapped core (Typical)



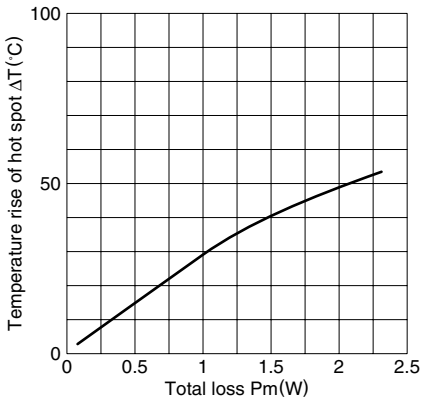
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI28 core (Typical)

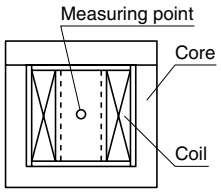


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

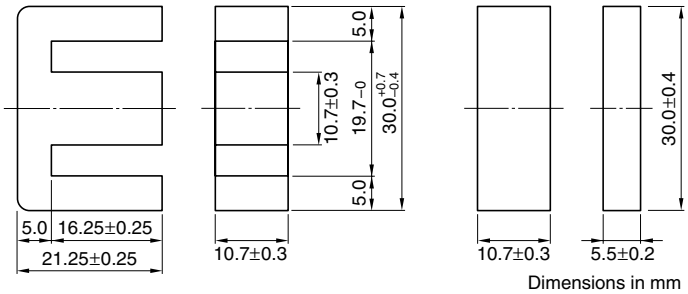
Temperature rise vs. Total loss for EI28 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI30 Cores(JIS FEI 30)



Dimensions in mm

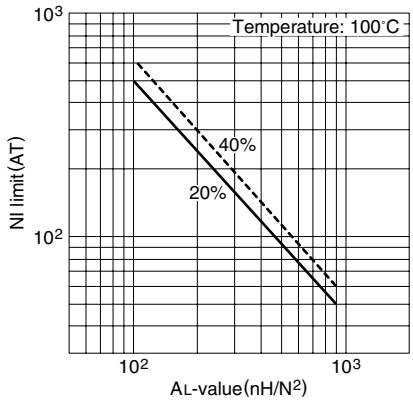
Parameter

Core factor	C1	mm^{-1}	0.523
Effective magnetic path length	ℓe	mm	58.0
Effective cross-sectional area	Ae	mm^2	111
Effective core volume	Ve	mm^3	6440
Cross-sectional center leg area	Acp	mm^2	114
Minimum cross-sectional area	Acp min.	mm^2	108
Cross-sectional winding area of core	Acw	mm^2	75.6
Weight (approx.)		g	34

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI30-Z	4690±25% (1kHz, 0.5mA)* 6490 min. (100kHz, 200mT)	3.1 max.	155W (100kHz)

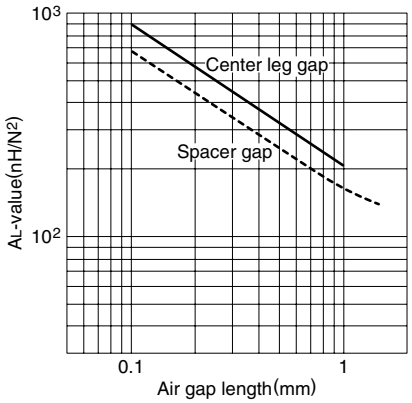
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI30 gapped core (Typical)



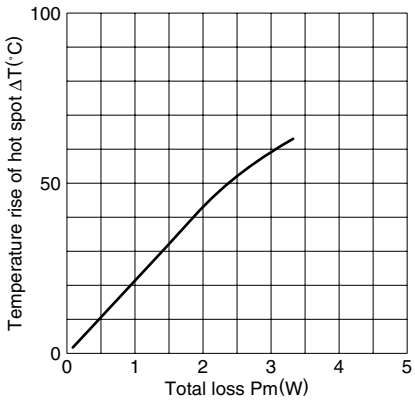
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI30 core (Typical)

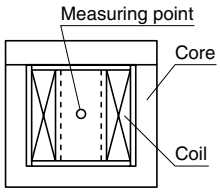


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

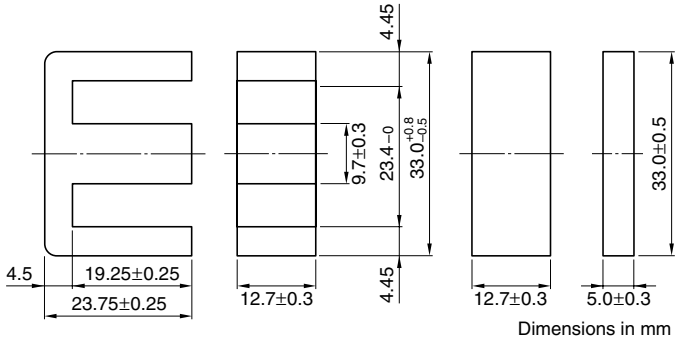
Temperature rise vs. Total loss for EI30 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI33/29/13 Cores



Dimensions in mm

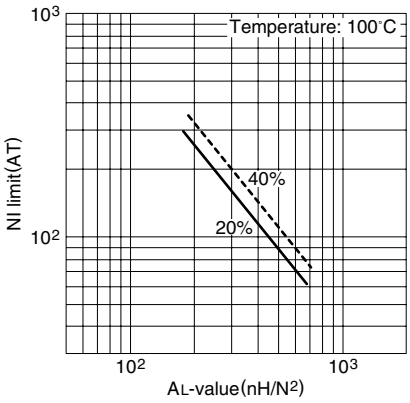
Parameter

Core factor	C1	mm^{-1}	0.567
Effective magnetic path length	ℓe	mm	67.5
Effective cross-sectional area	Ae	mm^2	119
Effective core volume	Ve	mm^3	8030
Cross-sectional center leg area	Acp	mm^2	123
Minimum cross-sectional area	Acp min.	mm^2	117
Cross-sectional winding area of core	Acw	mm^2	138.6
Weight (approx.)		g	41

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI33/29/13-Z	4400±25% (1kHz, 0.5mA)* 5980 min. (100kHz, 200mT)	3.5 max.	206W (100kHz)

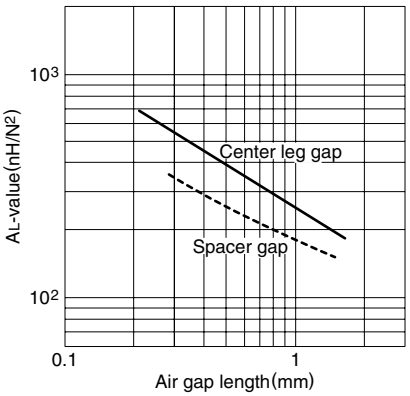
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI33/29/13 gapped core (Typical)



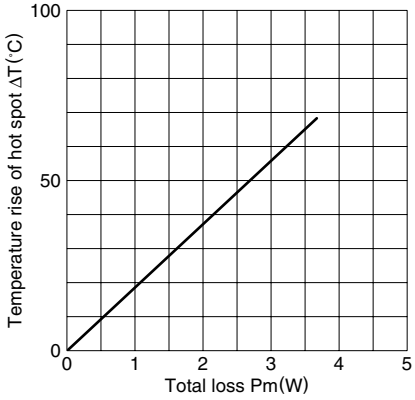
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI33/29/13 core (Typical)

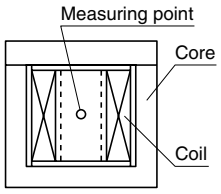


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

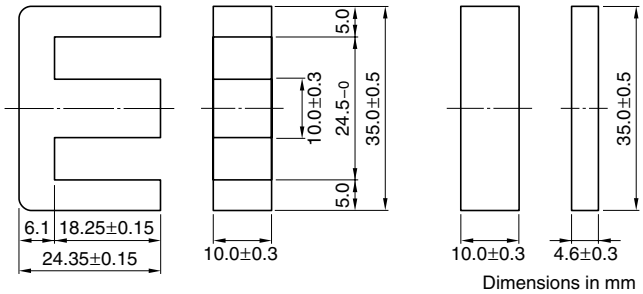
Temperature rise vs. Total loss for EI33/29/13 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI35 Cores(JIS FEI 35)



Dimensions in mm

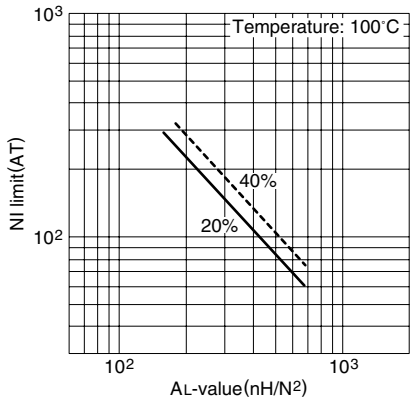
Parameter

Core factor	C1	mm^{-1}	0.664
Effective magnetic path length	ℓe	mm	67.1
Effective cross-sectional area	Ae	mm^2	101
Effective core volume	Ve	mm^3	6780
Cross-sectional center leg area	Acp	mm^2	100
Minimum cross-sectional area	Acp min.	mm^2	94.1
Cross-sectional winding area of core	Acw	mm^2	131.6
Weight (approx.)		g	36

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI35-Z	3800±25% (1kHz, 0.5mA)* 5110 min. (100kHz, 200mT)	2.85 max.	218W (100kHz)

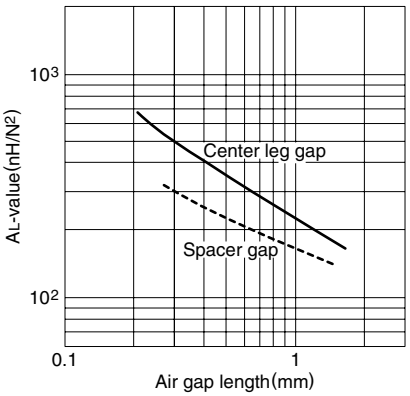
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI35 gapped core (Typical)



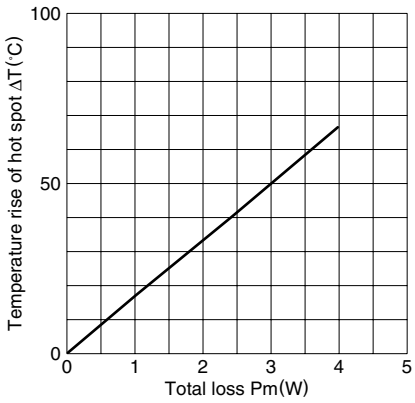
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI35 core (Typical)

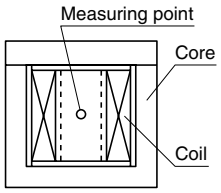


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

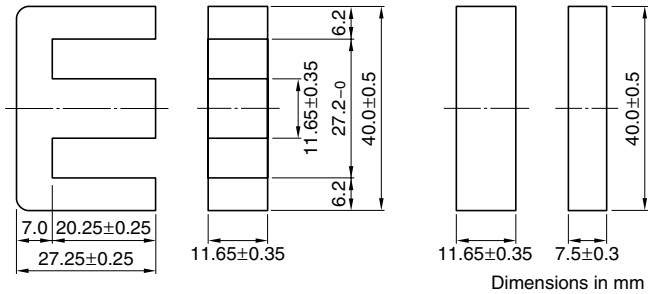
Temperature rise vs. Total loss for EI35 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI40 Cores(JIS FEI 40)



Dimensions in mm

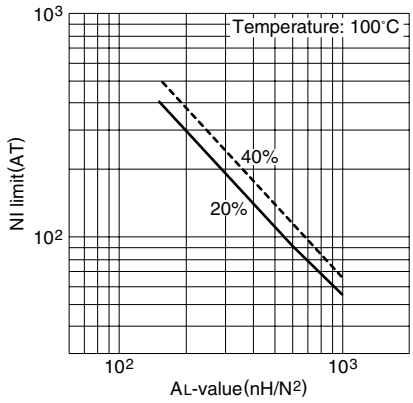
Parameter

Core factor	C1	mm^{-1}	0.520
Effective magnetic path length	ℓe	mm	77.0
Effective cross-sectional area	Ae	mm^2	148
Effective core volume	Ve	mm^3	11400
Cross-sectional center leg area	Acp	mm^2	136
Minimum cross-sectional area	Acp min.	mm^2	128
Cross-sectional winding area of core	Acw	mm^2	160.5
Weight (approx.)		g	60

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI40-Z	4860±25% (1kHz, 0.5mA)* 6520 min. (100kHz, 200mT)	4.8 max.	348W (100kHz)

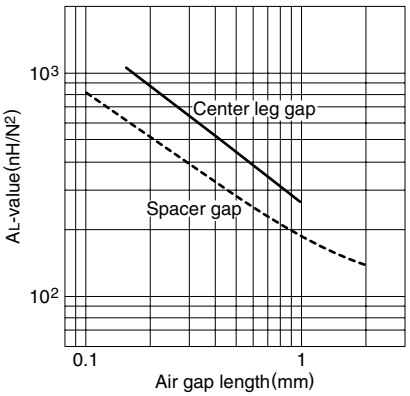
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI40 gapped core (Typical)



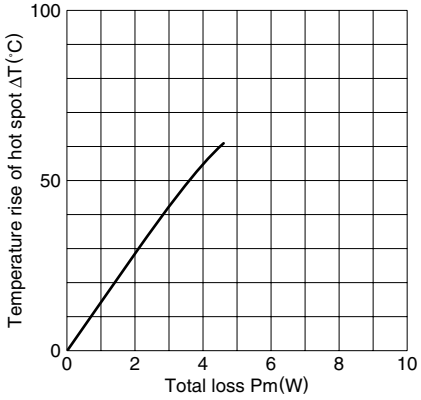
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI40 core (Typical)

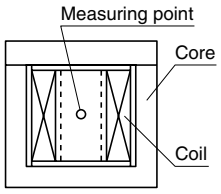


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

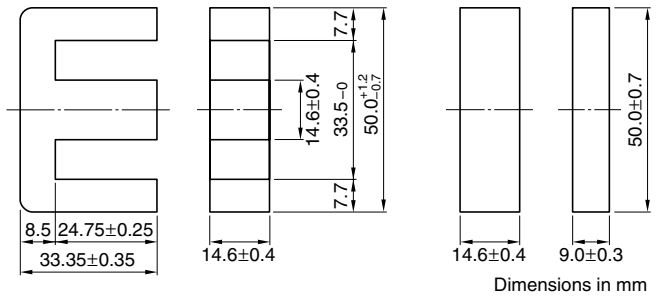
Temperature rise vs. Total loss for EI40 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI50 Cores(JIS FEI 50)



Dimensions in mm

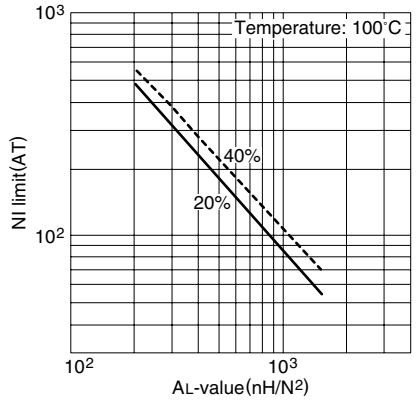
Parameter

Core factor	C1	mm^{-1}	0.409
Effective magnetic path length	ℓe	mm	94.0
Effective cross-sectional area	Ae	mm^2	230
Effective core volume	Ve	mm^3	21620
Cross-sectional center leg area	Acp	mm^2	213
Minimum cross-sectional area	Acp min.	mm^2	202
Cross-sectional winding area of core	Acw	mm^2	246.3
Weight (approx.)		g	115

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI50-Z	6110±25% (1kHz, 0.5mA)* 8300 min. (100kHz, 200mT)	9.2 max.	508W (100kHz)

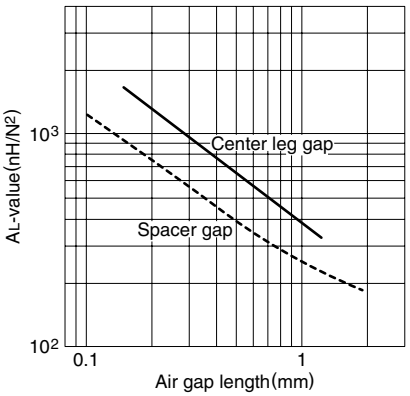
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI50 gapped core (Typical)



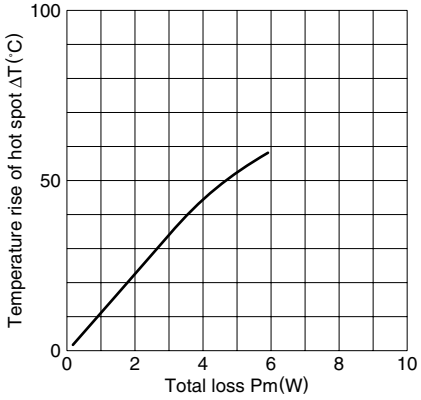
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI50 core (Typical)

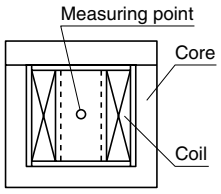


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

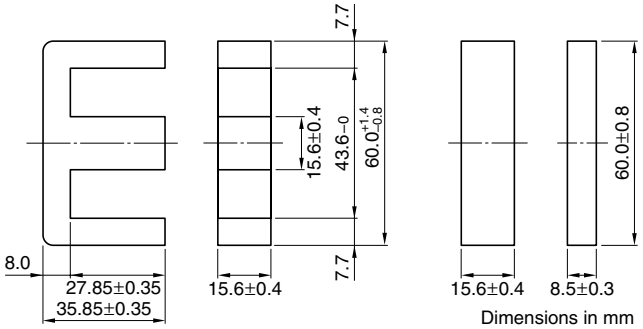
Temperature rise vs. Total loss for EI50 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI Series EI60 Cores(JIS FEI 60)



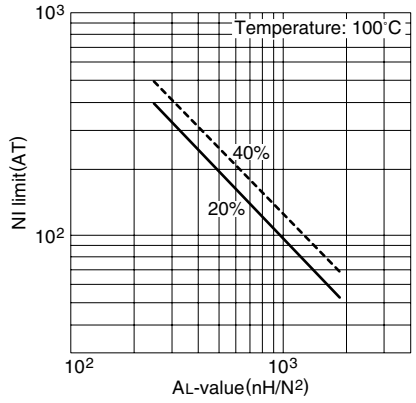
Parameter

Core factor	C1	mm^{-1}	0.441
Effective magnetic path length	ℓe	mm	109
Effective cross-sectional area	Ae	mm^2	247
Effective core volume	Ve	mm^3	26900
Cross-sectional center leg area	Acp	mm^2	243
Minimum cross-sectional area	Acp min.	mm^2	231
Cross-sectional winding area of core	Acw	mm^2	402.4
Weight (approx.)		g	139

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI60-Z	5670±25% (1kHz, 0.5mA)* 7690 min. (100kHz, 200mT)	12.5 max.	618W (100kHz)

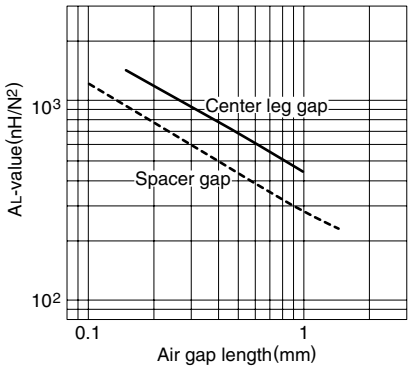
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI60 gapped core (Typical)



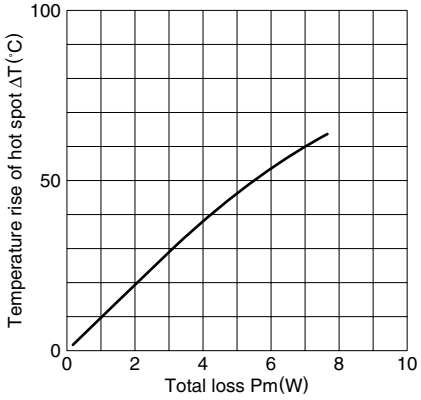
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI60 core (Typical)

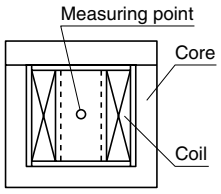


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

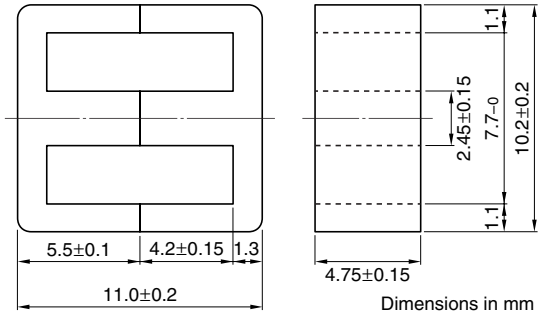
Temperature rise vs. Total loss for EI60 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE10/11 Cores(JIS FEE 10.2)



Dimensions in mm

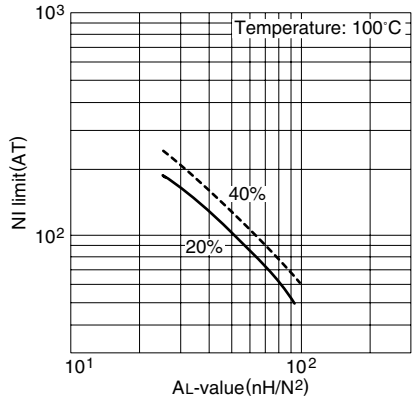
Parameter

Core factor	C1	mm^{-1}	2.16
Effective magnetic path length	ℓe	mm	26.1
Effective cross-sectional area	Ae	mm^2	12.1
Effective core volume	Ve	mm^3	315
Cross-sectional center leg area	Acp	mm^2	11.6
Minimum cross-sectional area	Acp min.	mm^2	10.6
Cross-sectional winding area of core	Acw	mm^2	23.3
Weight (approx.)		g	1.5

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE10/11-Z	850±25% (1kHz, 0.5mA)* 1450 min. (100kHz, 200mT)	0.14 max.	9.4W (100kHz)

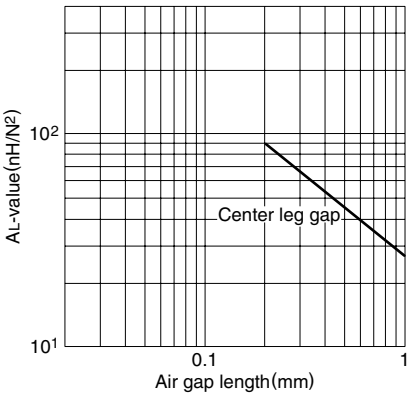
* *Coil: ø0.18 2UEW 100Ts*

NI limit vs. AL-value for PC40EE10/11 gapped core (Typical)



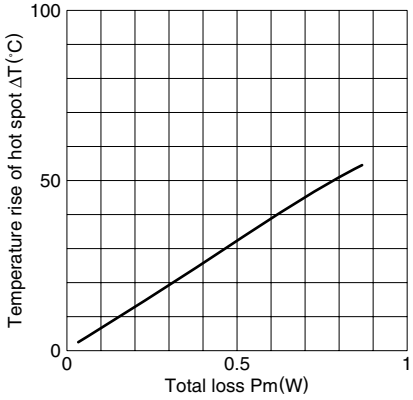
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE10/11 core (Typical)

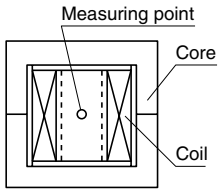


Measuring conditions • Coil: ø0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

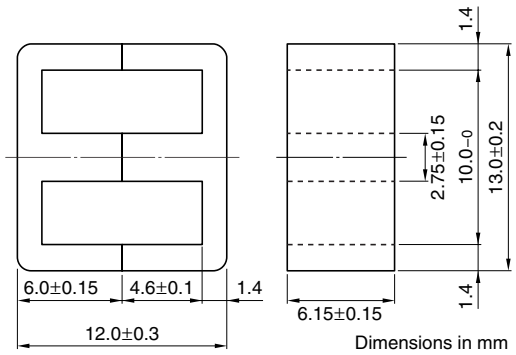
Temperature rise vs. Total loss for EE10/11 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE13 Cores



Dimensions in mm

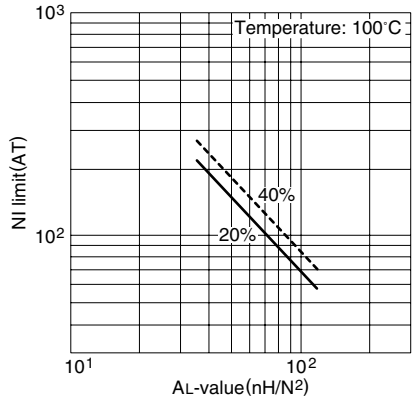
Parameter

Core factor	C1	mm^{-1}	1.77
Effective magnetic path length	ℓe	mm	30.2
Effective cross-sectional area	Ae	mm^2	17.1
Effective core volume	Ve	mm^3	517
Cross-sectional center leg area	Acp	mm^2	16.9
Minimum cross-sectional area	Acp min.	mm^2	15.6
Cross-sectional winding area of core	Acw	mm^2	34.3
Weight (approx.)		g	2.7

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE13-Z	1130±25% (1kHz, 0.5mA)* 1770 min. (100kHz, 200mT)	0.235 max.	17W (100kHz)

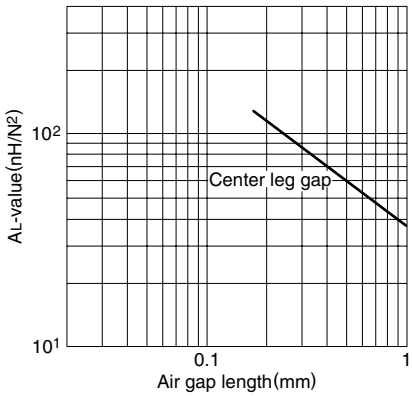
* *Coil: ø0.18 2UEW 100Ts*

NI limit vs. AL-value for PC40EE13 gapped core (Typical)



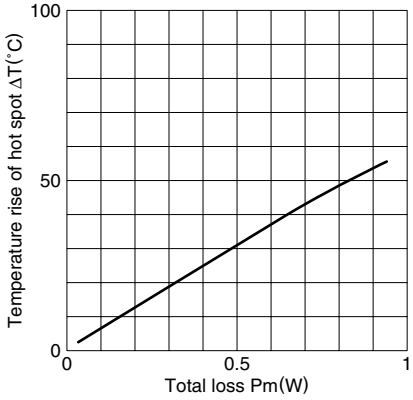
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE13 core (Typical)

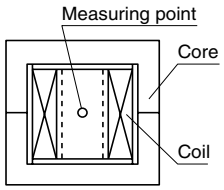


Measuring conditions • Coil: ø0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

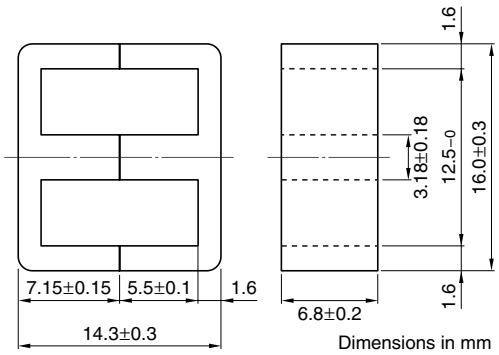
Temperature rise vs. Total loss for EE13 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series SEE16 Cores



Dimensions in mm

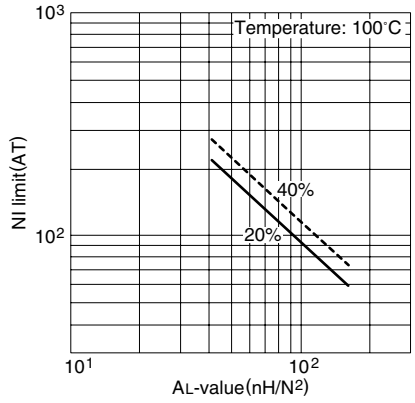
Parameter

Core factor	C1	mm^{-1}	1.69
Effective magnetic path length	ℓe	mm	36.6
Effective cross-sectional area	Ae	mm^2	21.7
Effective core volume	Ve	mm^3	795
Cross-sectional center leg area	Acp	mm^2	21.6
Minimum cross-sectional area	Acp min.	mm^2	19.8
Cross-sectional winding area of core	Acw	mm^2	52.9
Weight (approx.)		g	4.1

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40SEE16-Z	1240±25% (1kHz, 0.5mA)* 1850 min. (100kHz, 200mT)	0.37 max.	32W (100kHz)

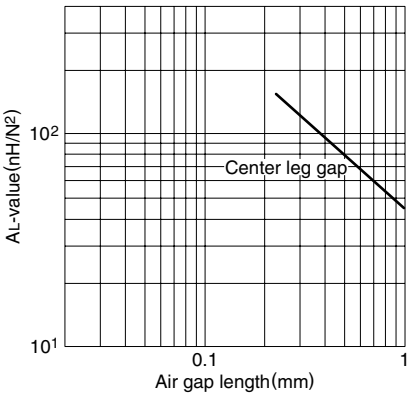
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40SEE16 gapped core (Typical)



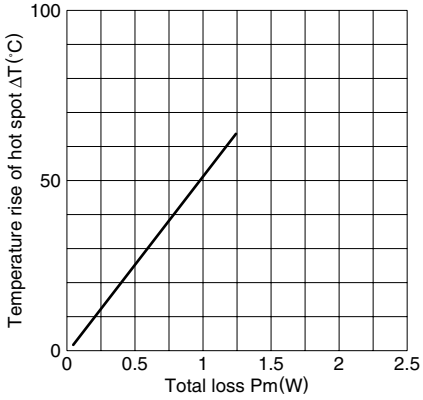
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40SEE16 core (Typical)

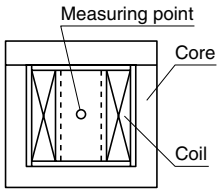


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for SEE16 core (Typical) (Ambient temperature: 25°C)

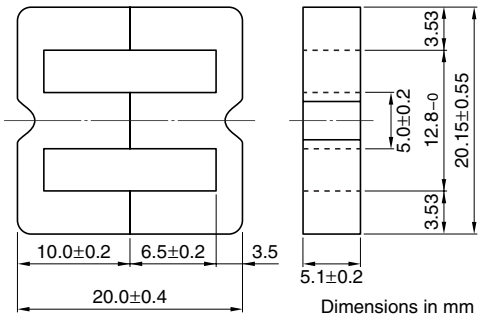


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE20/20/5 Cores(DIN 41295)

Based on DIN 41295.



Dimensions in mm

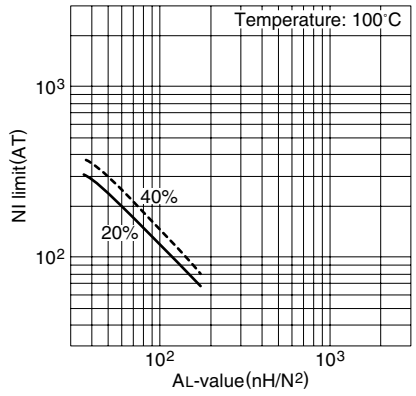
Parameter

Core factor	C1	mm^{-1}	1.38
Effective magnetic path length	ℓe	mm	43.0
Effective cross-sectional area	Ae	mm^2	31.0
Effective core volume	Ve	mm^3	1340
Cross-sectional center leg area	Acp	mm^2	25.5
Minimum cross-sectional area	Acp min.	mm^2	23.5
Cross-sectional winding area of core	Acw	mm^2	41.3
Weight (approx.)		g	7.5

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE20/20/5-Z	1400±25% (1kHz, 0.5mA)* 2270 min. (100kHz, 200mT)	0.51 max.	41W (100kHz)

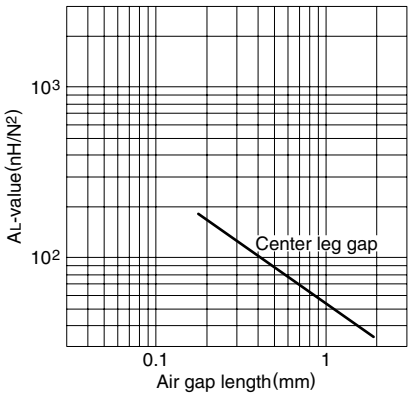
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EE20/20/5 gapped core (Typical)



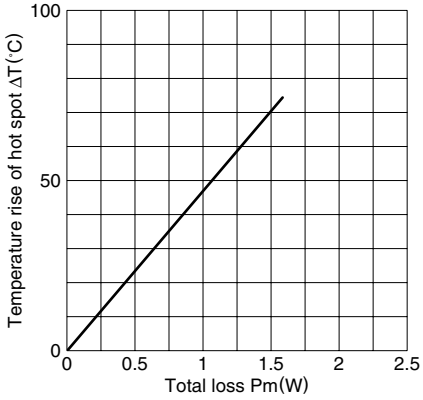
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE20/20/5 core (Typical)

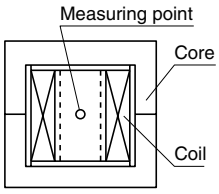


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE20/20/5 core (Typical) (Ambient temperature: 25°C)

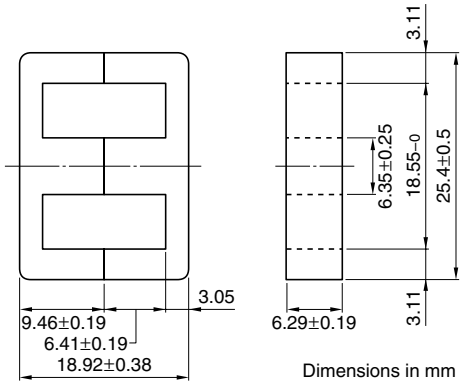


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE25/19 Cores

Based on standard U. S. lamination size.



Dimensions in mm

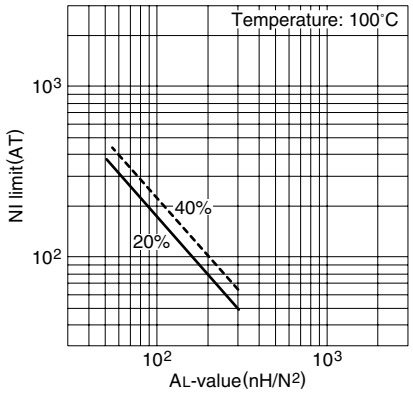
Parameter

Core factor	C1	mm^{-1}	1.22
Effective magnetic path length	ℓe	mm	48.7
Effective cross-sectional area	Ae	mm^2	40.0
Effective core volume	Ve	mm^3	1950
Cross-sectional center leg area	Acp	mm^2	39.9
Minimum cross-sectional area	Acp min.	mm^2	37.2
Cross-sectional winding area of core	Acw	mm^2	79.0
Weight (approx.)		g	9.1

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE25/19-Z	2000±25% (1kHz, 0.5mA)* 2570 min. (100kHz, 200mT)	0.86 max.	70W (100kHz)

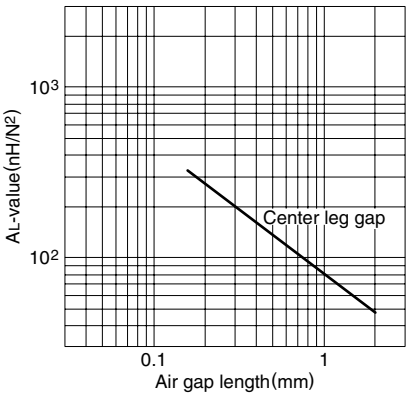
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EE25/19 gapped core (Typical)



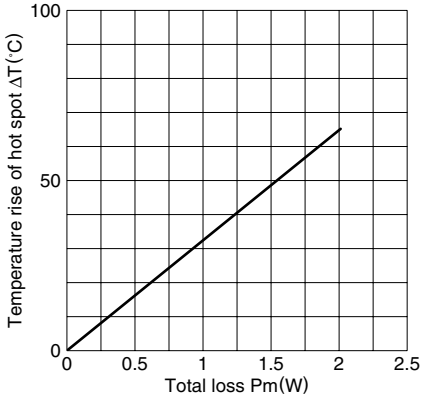
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE25/19 core (Typical)

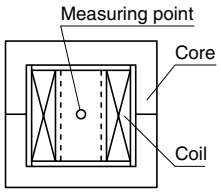


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE25/19 core (Typical) (Ambient temperature: 25°C)

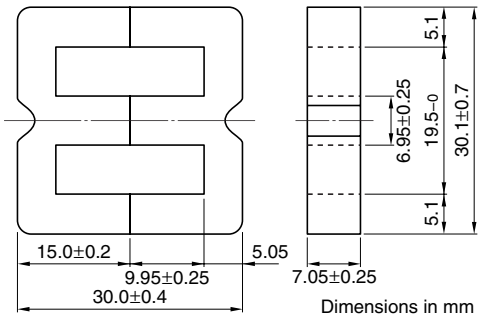


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE30/30/7 Cores(DIN 41295)

Based on DIN 41295



Dimensions in mm

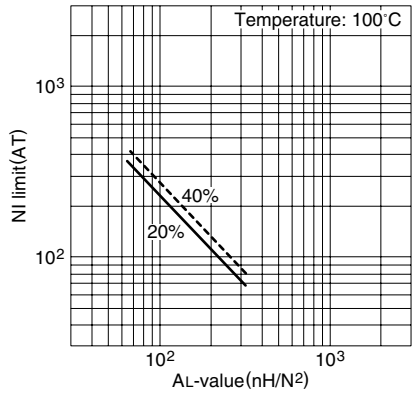
Parameter

Core factor	C1	mm^{-1}	1.12
Effective magnetic path length	ℓe	mm	66.9
Effective cross-sectional area	Ae	mm^2	59.7
Effective core volume	Ve	mm^3	4000
Cross-sectional center leg area	Acp	mm^2	49.0
Minimum cross-sectional area	Acp min.	mm^2	45.6
Cross-sectional winding area of core	Acw	mm^2	129
Weight (approx.)		g	22

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE30/30/7-Z	2100±25% (1kHz, 0.5mA)* 3030 min. (100kHz, 200mT)	1.51 max.	133W (100kHz)

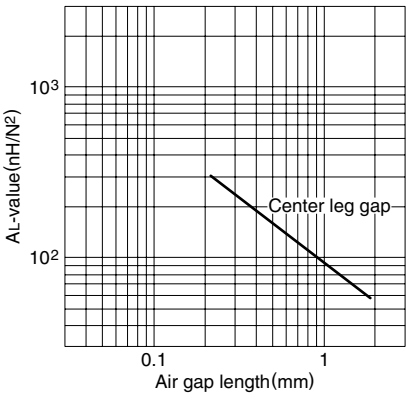
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EE30/30/7 gapped core (Typical)



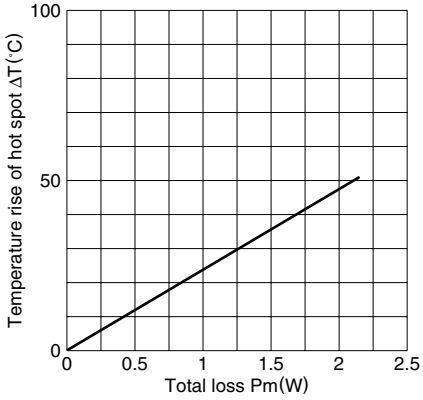
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE30/30/7 core (Typical)

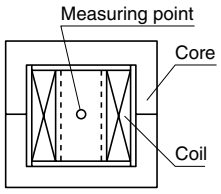


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE30/30/7 core (Typical) (Ambient temperature: 25°C)

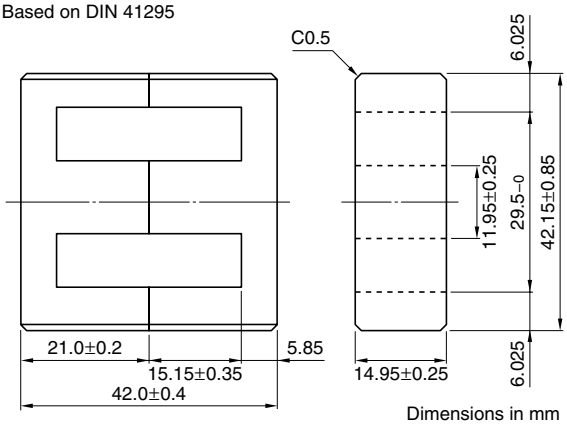


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE42/42/15 Cores(DIN 41295)

Based on DIN 41295



Dimensions in mm

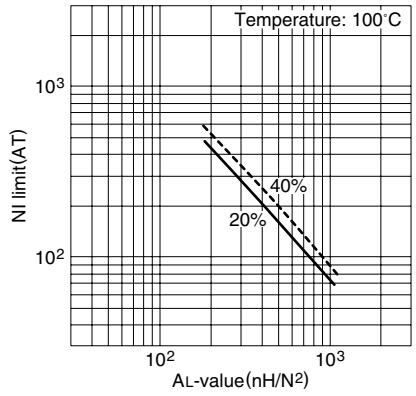
Parameter

Core factor	C1	mm^{-1}	0.533
Effective magnetic path length	ℓe	mm	97.0
Effective cross-sectional area	Ae	mm^2	182
Effective core volume	Ve	mm^3	17600
Cross-sectional center leg area	Acp	mm^2	179
Minimum cross-sectional area	Acp min.	mm^2	172
Cross-sectional winding area of core	Acw	mm^2	275
Weight (approx.)		g	80

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE42/42/15-Z	4700±25% (1kHz, 0.5mA)* 7050 min. (100kHz, 200mT)	8.0 max.	419W (100kHz)

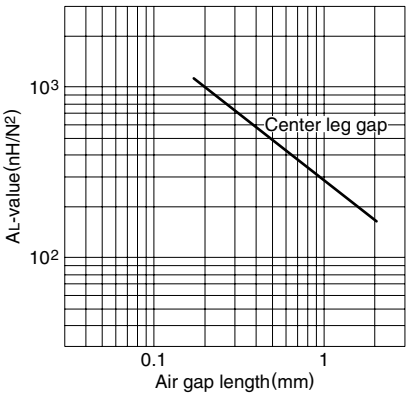
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EE42/42/15 gapped core (Typical)



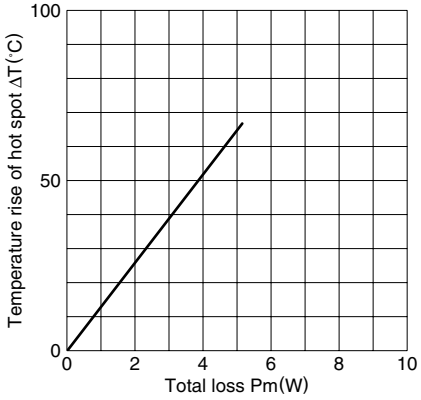
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE42/42/15 core (Typical)

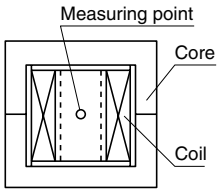


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE42/42/15 core (Typical) (Ambient temperature: 25°C)

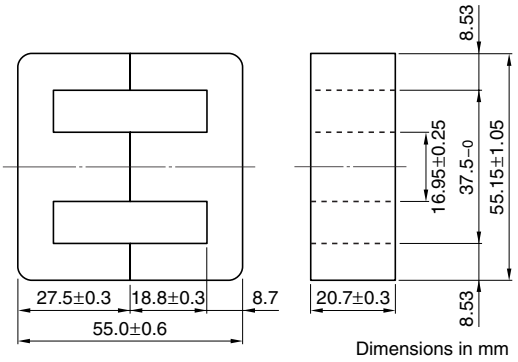


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE55/55/21 Cores(DIN 41295)

Based on DIN 41295



Dimensions in mm

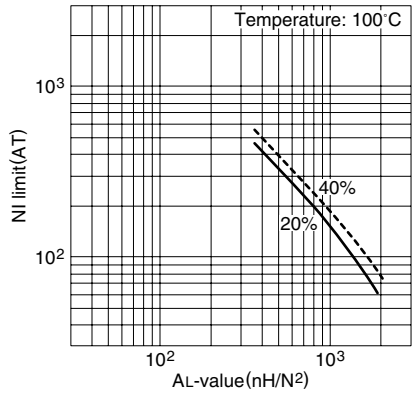
Parameter

Core factor	C1	mm^{-1}	0.348
Effective magnetic path length	ℓe	mm	123
Effective cross-sectional area	Ae	mm^2	354
Effective core volume	Ve	mm^3	43700
Cross-sectional center leg area	Acp	mm^2	351
Minimum cross-sectional area	Acp min.	mm^2	341
Cross-sectional winding area of core	Acw	mm^2	397
Weight (approx.)		g	234

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE55/55/21-Z	7100±25% (1kHz, 0.5mA)* 10830 min. (100kHz, 200mT)	11.0 max.	814W (100kHz)

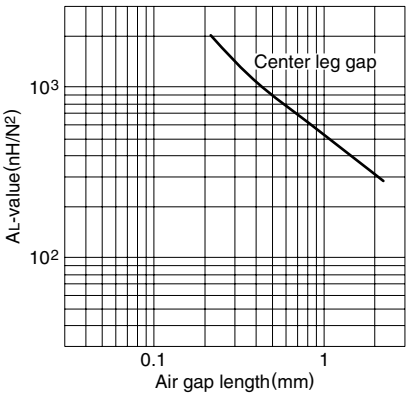
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EE55/55/21 gapped core (Typical)



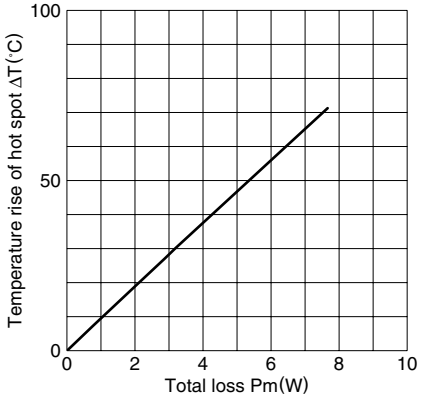
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE55/55/21 core (Typical)

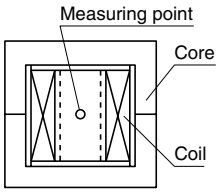


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

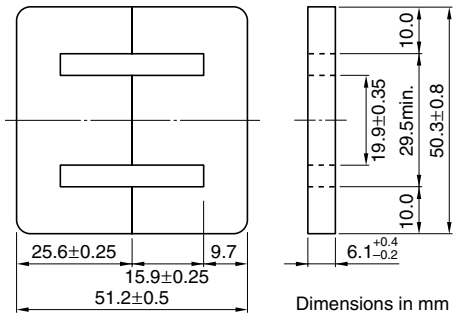
Temperature rise vs. Total loss for EE55/55/21 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE50.3/51/6 Cores



Dimensions in mm

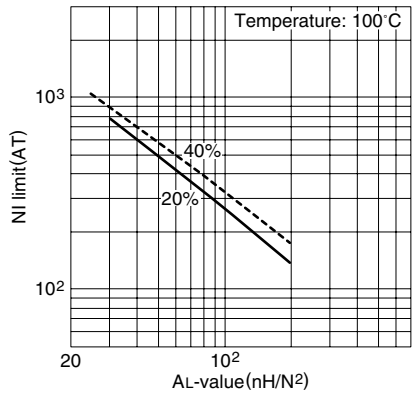
Parameter

Core factor	C1	mm−1	0.868
Effective magnetic path length	ℓe	mm	105
Effective cross-sectional area	Ae	mm²	121
Effective core volume	Ve	mm³	12700
Cross-sectional center leg area	Acp	mm²	121
Minimum cross-sectional area	Acp min.	mm²	115
Cross-sectional winding area of core	Acw	mm²	163.3
Weight (approx.)		g	68

Part No.	AL-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE50.3/51/6-Z	2900±25% (1kHz, 0.5mA)* 3950 min. (100kHz, 200mT)	5.83 max.	213W (100kHz)

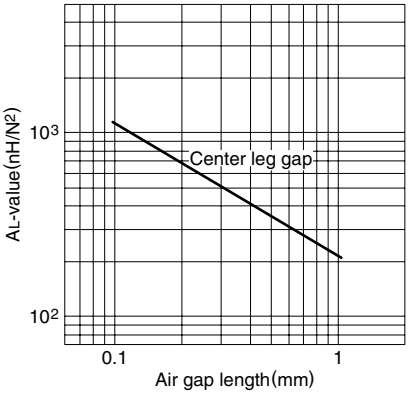
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EE50.3/51/6 gapped core (Typical)



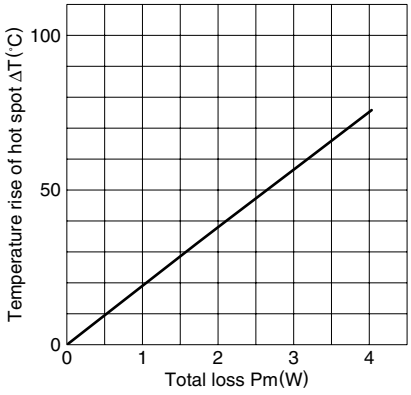
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE50.3/51/6 core (Typical)

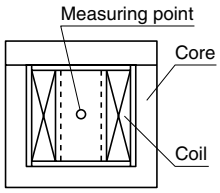


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

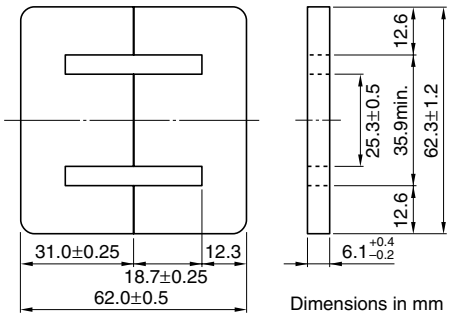
Temperature rise vs. Total loss for EE50.3/51/6 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE Series EE62.3/62/6 Cores



Dimensions in mm

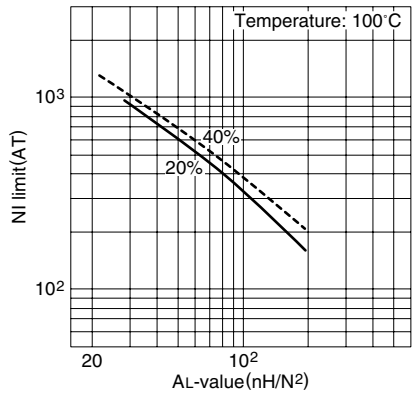
Parameter

Core factor	C1	mm^{-1}	0.822
Effective magnetic path length	ℓe	mm	126
Effective cross-sectional area	Ae	mm^2	153
Effective core volume	Ve	mm^3	19300
Cross-sectional center leg area	Acp	mm^2	154
Minimum cross-sectional area	Acp min.	mm^2	146.3
Cross-sectional winding area of core	Acw	mm^2	202
Weight (approx.)		g	102

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE62.3/62/6-Z	3100±25% (1kHz, 0.5mA)* 4150 min. (100kHz, 200mT)	8.85 max.	250W (100kHz)

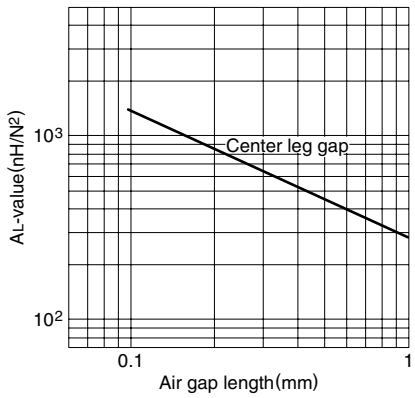
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. AL-value for PC40EE62.3/62/6 gapped core (Typical)



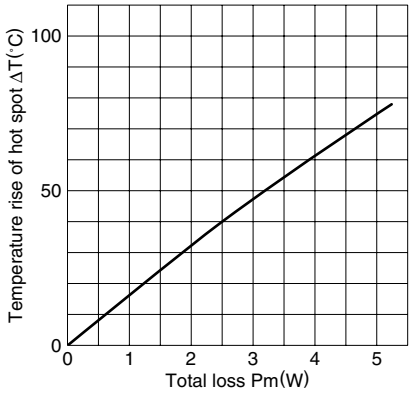
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE62.3/62/6 core (Typical)

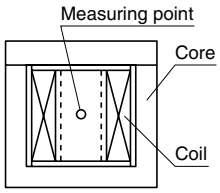


Measuring conditions
- *Coil: ø0.23 2UEW 100Ts*
- *Frequency: 1kHz*
- *Level: 0.5mA*

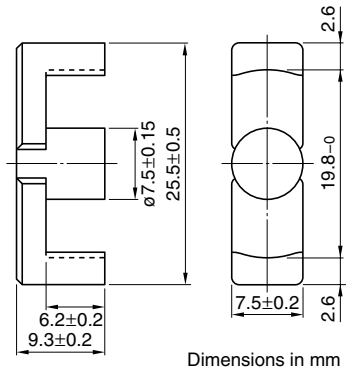
Temperature rise vs. Total loss for EE62.3/62/6 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER Series EER25.5 Cores(JIS FEER 25.5A)



Dimensions in mm

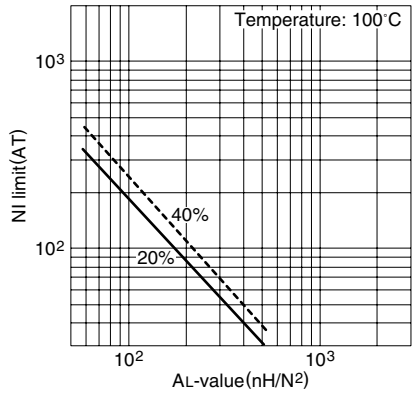
Parameter

Core factor	C1	mm^{-1}	1.08
Effective magnetic path length	ℓe	mm	48.2
Effective cross-sectional area	Ae	mm^2	44.8
Effective core volume	Ve	mm^3	2160
Cross-sectional center pole area	Acp	mm^2	44.2
Minimum cross-sectional center pole area	Acp min.	mm^2	42.4
Cross-sectional winding area of core	Acw	mm^2	79.4
Weight (approx.)		g	11

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER25.5-Z	1920±25% (1kHz, 0.5mA)* 2910 min. (100kHz, 200mT)	0.98 max.	87W (100kHz)

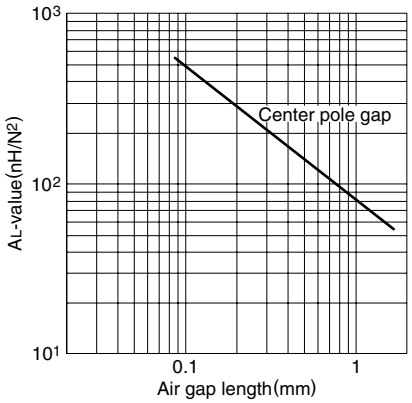
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER25.5 gapped core (Typical)



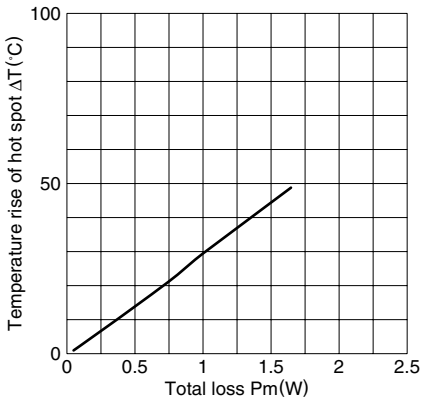
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER25.5 core (Typical)

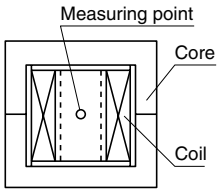


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

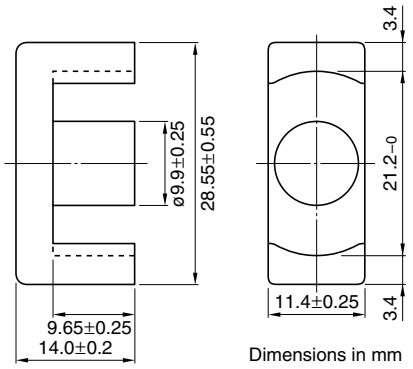
Temperature rise vs. Total loss for EER25.5 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER Series EER28 Cores(JIS FEER 28.5A)



Dimensions in mm

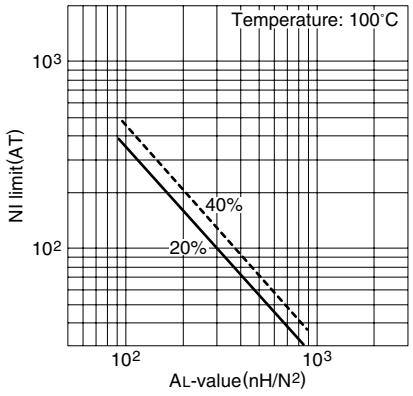
Parameter

Core factor	C1	mm^{-1}	0.78
Effective magnetic path length	ℓe	mm	64.0
Effective cross-sectional area	Ae	mm^2	82.1
Effective core volume	Ve	mm^3	5250
Cross-sectional center pole area	Acp	mm^2	77.0
Minimum cross-sectional center pole area	Acp min.	mm^2	73.1
Cross-sectional winding area of core	Acw	mm^2	114
Weight (approx.)		g	28

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER28-Z	2870±25% (1kHz, 0.5mA)* 4350 min. (100kHz, 200mT)	2.3 max.	203W (100kHz)

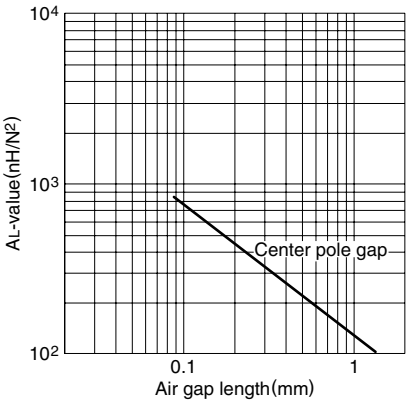
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER28 gapped core (Typical)



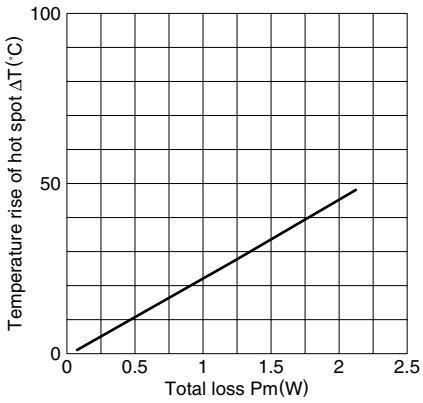
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER28 core (Typical)

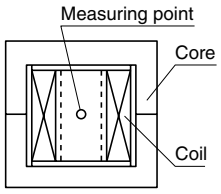


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

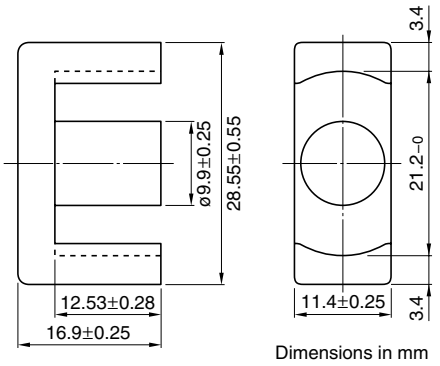
Temperature rise vs. Total loss for EER28 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER Series EER28L Cores(JIS FEER 28.5B)



Dimensions in mm

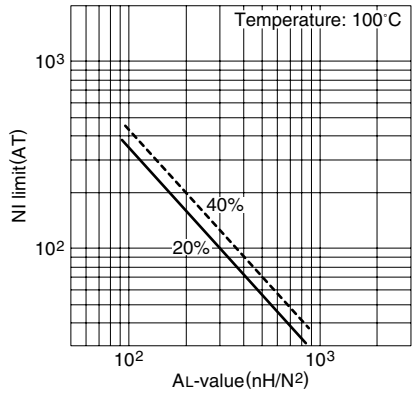
Parameter

Core factor	C1	mm^{-1}	0.928
Effective magnetic path length	ℓe	mm	75.5
Effective cross-sectional area	Ae	mm^2	81.4
Effective core volume	Ve	mm^3	6150
Cross-sectional center pole area	Acp	mm^2	77.0
Minimum cross-sectional center pole area	Acp min.	mm^2	73.1
Cross-sectional winding area of core	Acw	mm^2	148
Weight (approx.)		g	33

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER28L-Z	2520±25% (1kHz, 0.5mA)* 3660 min. (100kHz, 200mT)	2.7 max.	228W (100kHz)

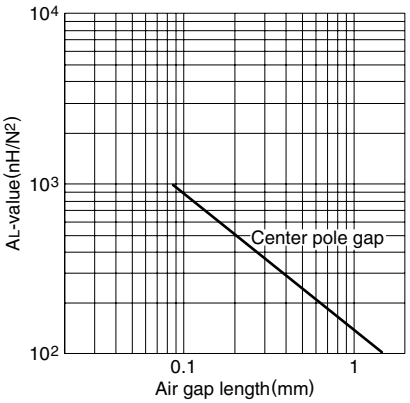
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER28L gapped core (Typical)



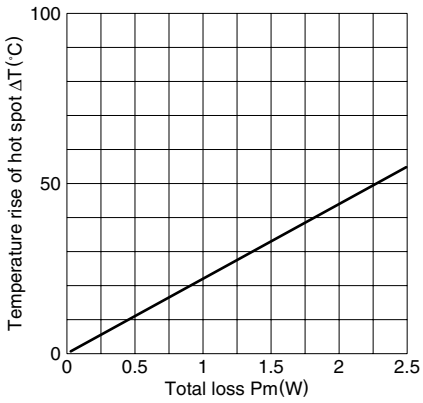
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER28L core (Typical)

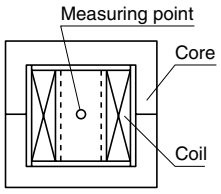


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

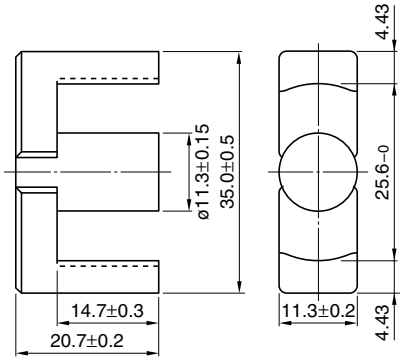
Temperature rise vs. Total loss for EER28L core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER Series EER35 Cores(JIS FEER 35A)



Dimensions in mm

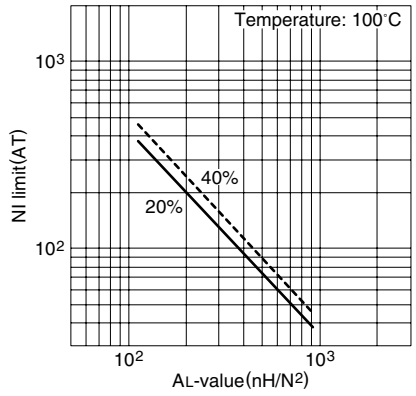
Parameter

Core factor	C1	mm^{-1}	0.849
Effective magnetic path length	ℓe	mm	90.8
Effective cross-sectional area	Ae	mm^2	107
Effective core volume	Ve	mm^3	9720
Cross-sectional center pole area	Acp	mm^2	100
Minimum cross-sectional center pole area	Acp min.	mm^2	97.6
Cross-sectional winding area of core	Acw	mm^2	218
Weight (approx.)		g	52

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER35-Z	2770±25% (1kHz, 0.5mA)* 4000 min. (100kHz, 200mT)	4.2 max.	325W (100kHz)

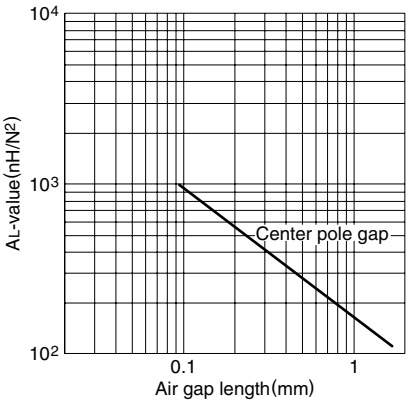
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER35 gapped core (Typical)



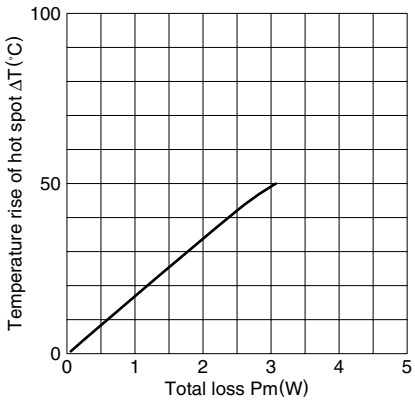
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER35 core (Typical)

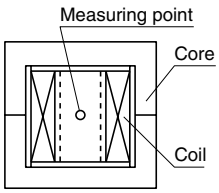


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

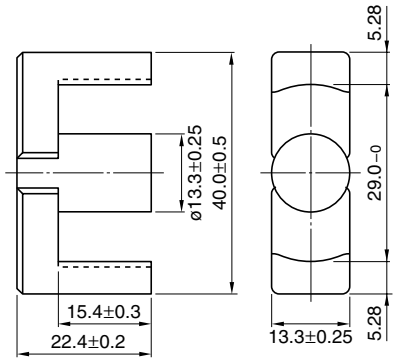
Temperature rise vs. Total loss for EER35 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER Series EER40 Cores



Dimensions in mm

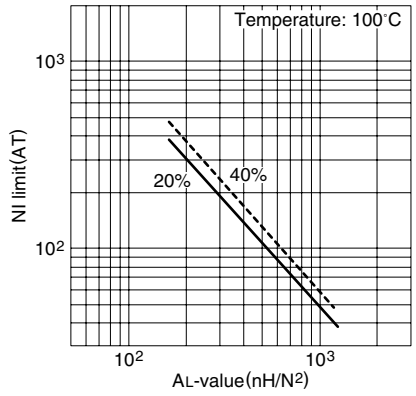
Parameter

Core factor	C1	mm^{-1}	0.658
Effective magnetic path length	ℓe	mm	98.0
Effective cross-sectional area	Ae	mm^2	149
Effective core volume	Ve	mm^3	14600
Cross-sectional center pole area	Acp	mm^2	139
Minimum cross-sectional center pole area	Acp min.	mm^2	134
Cross-sectional winding area of core	Acw	mm^2	249
Weight (approx.)		g	78

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER40-Z	3620±25% (1kHz, 0.5mA)* 5160 min. (100kHz, 200mT)	6.3 max.	421W (100kHz)

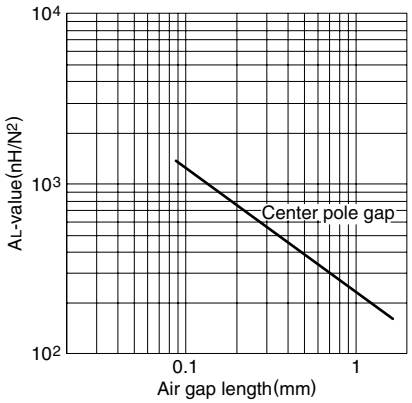
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER40 gapped core (Typical)



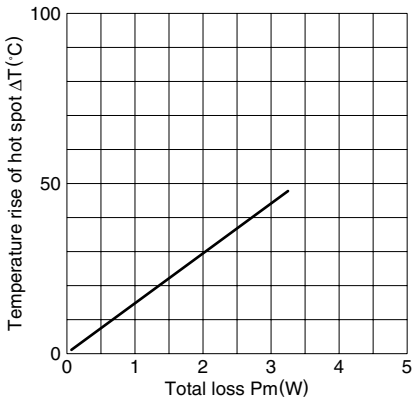
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER40 core (Typical)

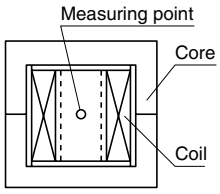


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

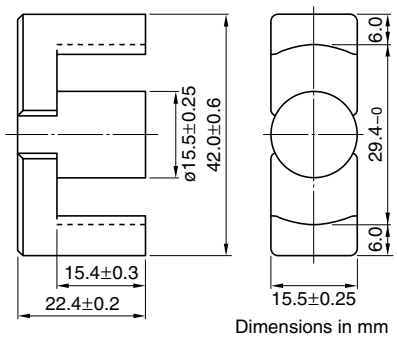
Temperature rise vs. Total loss for EER40 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER Series EER42 Cores(JIS FEER 42)



Dimensions in mm

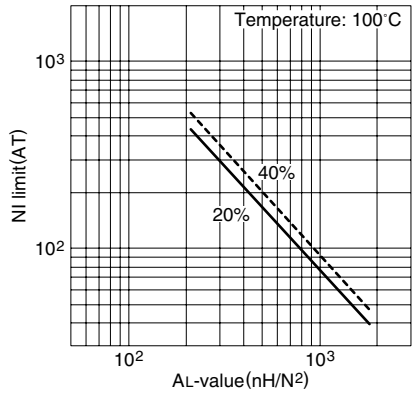
Parameter

Core factor	C1	mm^{-1}	0.509
Effective magnetic path length	ℓe	mm	98.8
Effective cross-sectional area	Ae	mm^2	194
Effective core volume	Ve	mm^3	19200
Cross-sectional center pole area	Acp	mm^2	187
Minimum cross-sectional center pole area	Acp min.	mm^2	183
Cross-sectional winding area of core	Acw	mm^2	223
Weight (approx.)		g	102

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER42-Z	4690±25% (1kHz, 0.5mA)* 6670 min. (100kHz, 200mT)	8.6 max.	433W (100kHz)

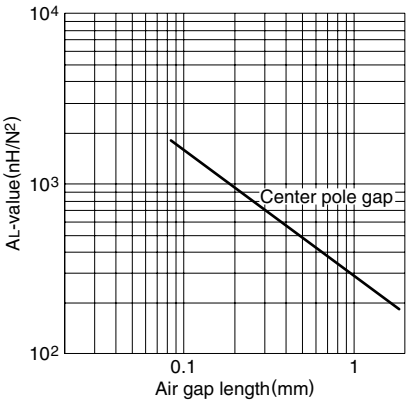
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER42 gapped core (Typical)



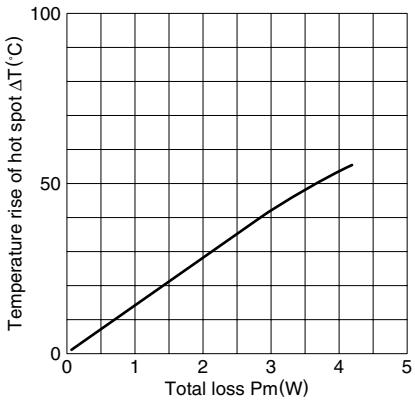
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER42 core (Typical)

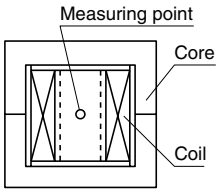


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

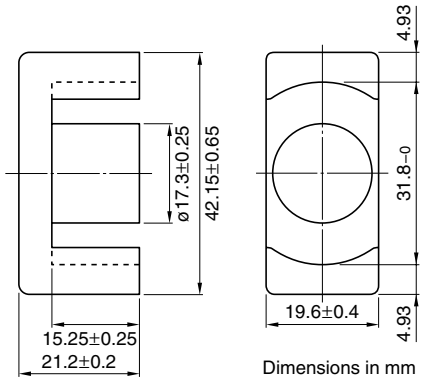
Temperature rise vs. Total loss for EER42 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER Series EER42/42/20 Cores



Dimensions in mm

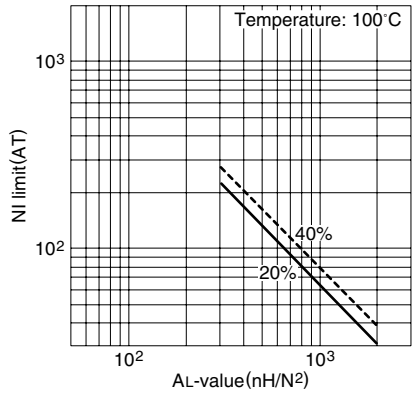
Parameter

Core factor	C1	mm−1	0.411
Effective magnetic path length	ℓe	mm	98.6
Effective cross-sectional area	Ae	mm²	240
Effective core volume	Ve	mm³	23700
Cross-sectional center pole area	Acp	mm²	235
Minimum cross-sectional center pole area	Acp min.	mm²	228
Cross-sectional winding area of core	Acw	mm²	229
Weight (approx.)		g	116

Part No.	AL-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER42/42/20-Z	5340±25% (1kHz, 0.5mA)* 8260 min. (100kHz, 200mT)	10.7 max.	509W (100kHz)

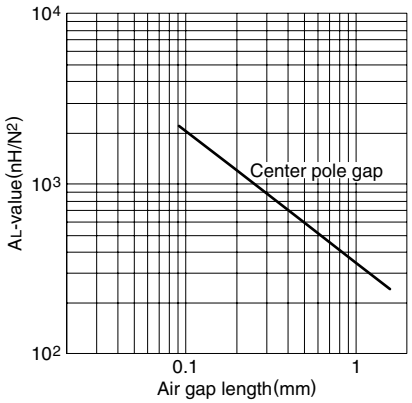
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER42/42/20 gapped core (Typical)



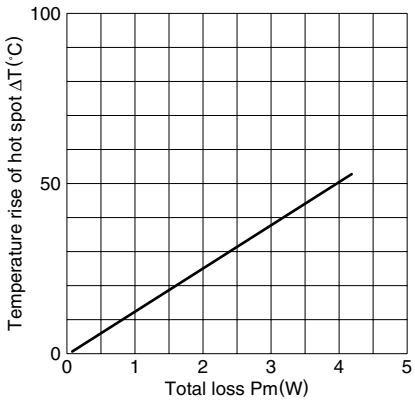
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER42/42/20 core (Typical)

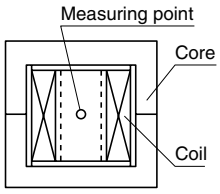


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

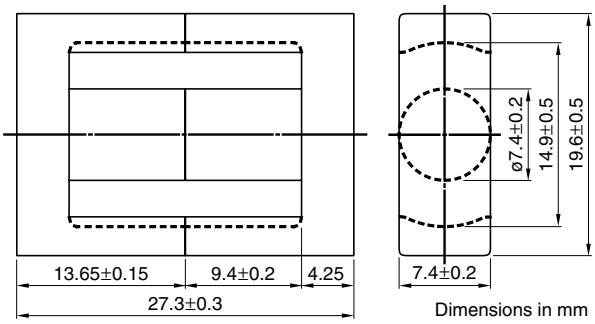
Temperature rise vs. Total loss for EER42/42/20core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



ETD Series ETD19 Cores



Dimensions in mm

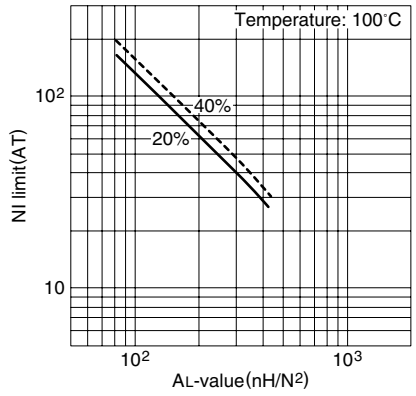
Parameter

Core factor	C1	mm^{-1}	1.32
Effective magnetic path length	ℓe	mm	54.6
Effective cross-sectional area	Ae	mm^2	41.3
Effective core volume	Ve	mm^3	2260
Cross-sectional center pole area	Acp	mm^2	43
Minimum cross-sectional center pole area	Acp min.	mm^2	40.7
Cross-sectional winding area of core	Acw	mm^2	70.5
Weight (approx.)		g	13.3

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD19-Z	1720±25% (1kHz, 0.5mA)* 2380 min. (100kHz, 200mT)	1.1 max.	79W (100kHz)

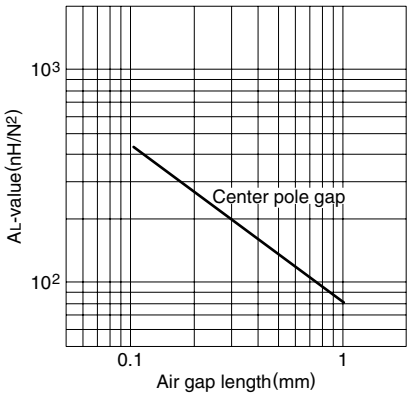
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD19 gapped core (Typical)



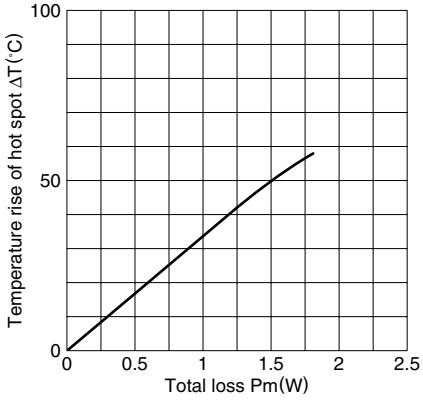
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD19 core (Typical)

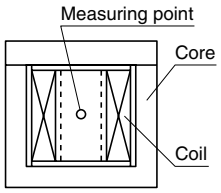


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

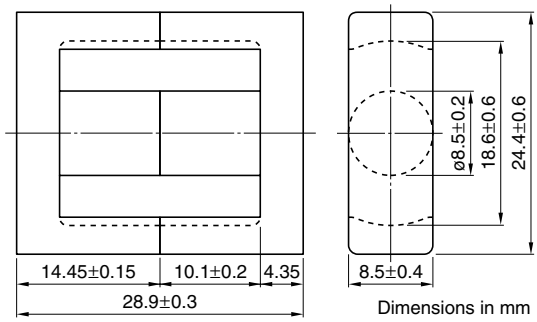
Temperature rise vs. Total loss for ETD19 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



ETD Series ETD24 Cores



Dimensions in mm

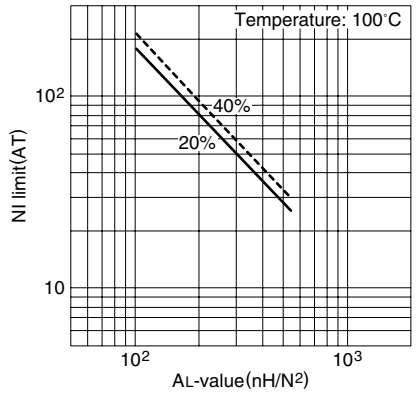
Parameter

Core factor	C1	mm^{-1}	1.10
Effective magnetic path length	ℓe	mm	61.9
Effective cross-sectional area	Ae	mm^2	56.3
Effective core volume	Ve	mm^3	3480
Cross-sectional center pole area	Acp	mm^2	56.7
Minimum cross-sectional center pole area	Acp min.	mm^2	54.1
Cross-sectional winding area of core	Acw	mm^2	102
Weight (approx.)		g	19.5

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD24-Z	2125±25% (1kHz, 0.5mA)* 2860 min. (100kHz, 200mT)	1.6 max.	115W (100kHz)

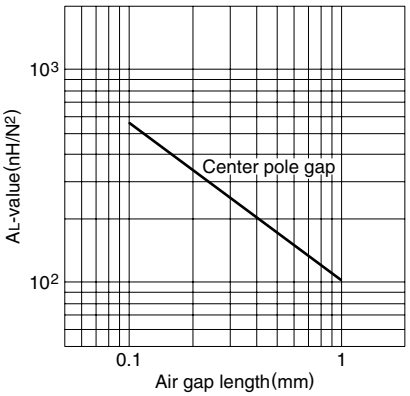
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD24 gapped core (Typical)



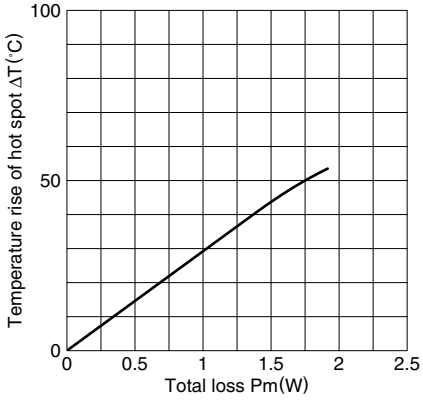
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD24 core (Typical)

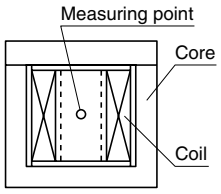


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

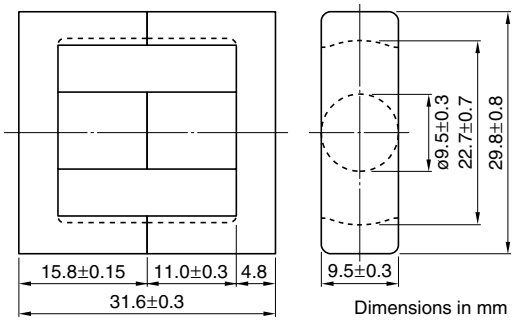
Temperature rise vs. Total loss for ETD24 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



ETD Series ETD29 Cores



Dimensions in mm

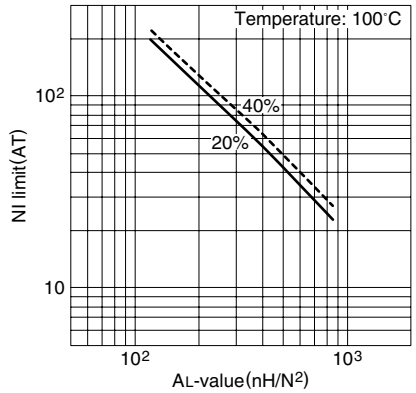
Parameter

Core factor	C1	mm^{-1}	0.959
Effective magnetic path length	ℓe	mm	70.6
Effective cross-sectional area	Ae	mm^2	73.6
Effective core volume	Ve	mm^3	5200
Cross-sectional center pole area	Acp	mm^2	70.9
Minimum cross-sectional center pole area	Acp min.	mm^2	66.5
Cross-sectional winding area of core	Acw	mm^2	145.2
Weight (approx.)		g	28

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD29-Z	2500±25% (1kHz, 0.5mA)* 3540 min. (100kHz, 200mT)	2.4 max.	170W (100kHz)

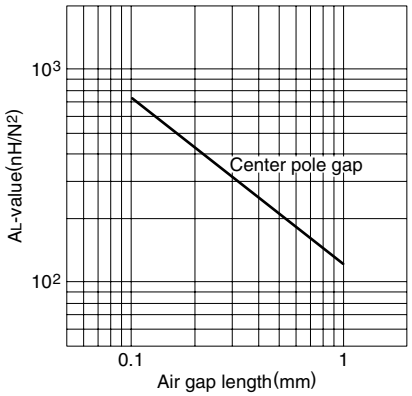
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD29 gapped core (Typical)



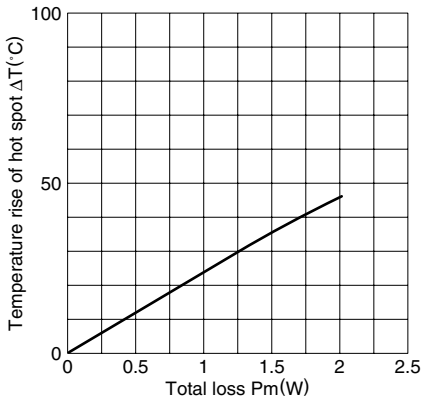
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD29 core (Typical)

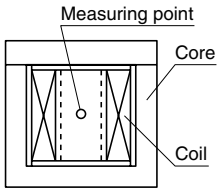


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

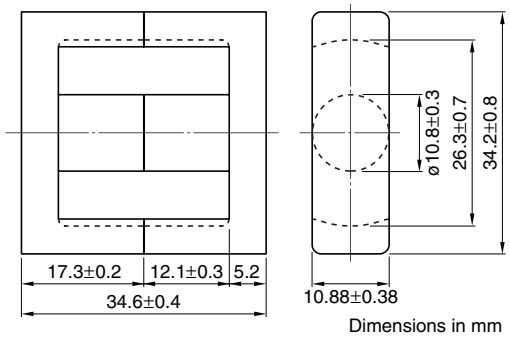
Temperature rise vs. Total loss for ETD29 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



ETD Series ETD34 Cores



Dimensions in mm

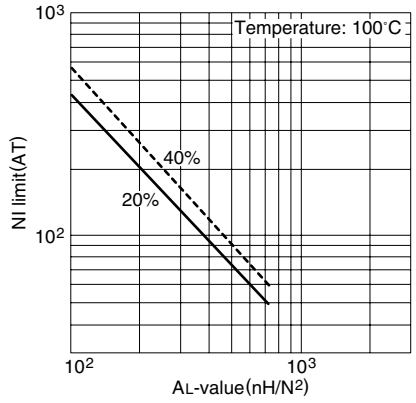
Parameter

Core factor	C1	mm^{-1}	0.810
Effective magnetic path length	ℓe	mm	78.6
Effective cross-sectional area	Ae	mm^2	97.1
Effective core volume	Ve	mm^3	7630
Cross-sectional center pole area	Acp	mm^2	91.6
Minimum cross-sectional center pole area	Acp min.	mm^2	86.6
Cross-sectional winding area of core	Acw	mm^2	188
Weight (approx.)		g	40

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD34-Z	2780±25% (1kHz, 0.5mA)* 4190 min. (100kHz, 200mT)	3.31 max.	271W (100kHz)

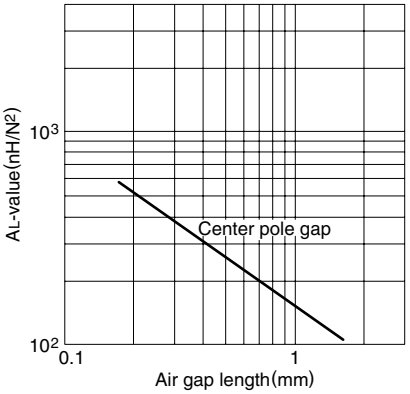
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD34 gapped core (Typical)



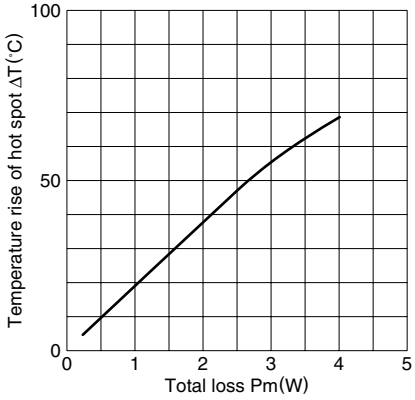
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD34 core (Typical)

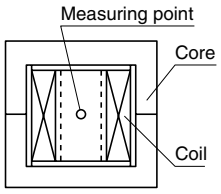


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

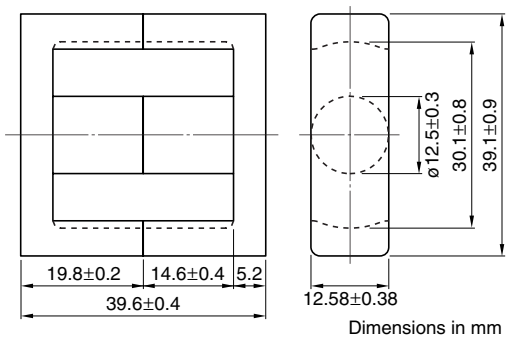
Temperature rise vs. Total loss for ETD34 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



ETD Series ETD39 Cores



Dimensions in mm

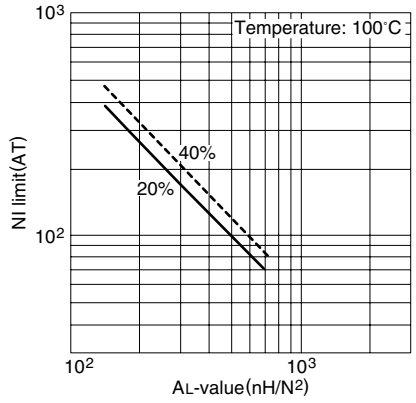
Parameter

Core factor	C1	mm^{-1}	0.737
Effective magnetic path length	ℓe	mm	92.1
Effective cross-sectional area	Ae	mm^2	125
Effective core volume	Ve	mm^3	11500
Cross-sectional center pole area	Acp	mm^2	123
Minimum cross-sectional center pole area	Acp min.	mm^2	117
Cross-sectional winding area of core	Acw	mm^2	257
Weight (approx.)		g	60

Part No.	AL-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD39-Z	3150±25% (1kHz, 0.5mA)* 4600 min. (100kHz, 200mT)	5.3 max.	382W (100kHz)

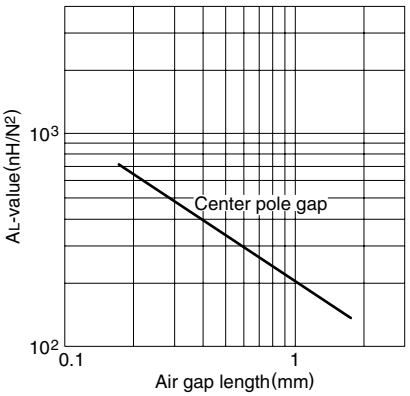
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD39 gapped core (Typical)



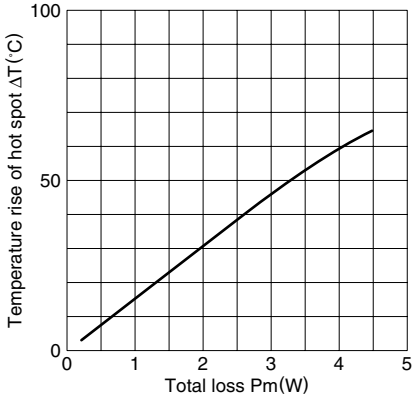
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD39 core (Typical)

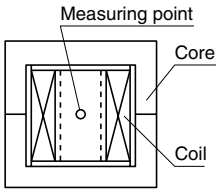


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

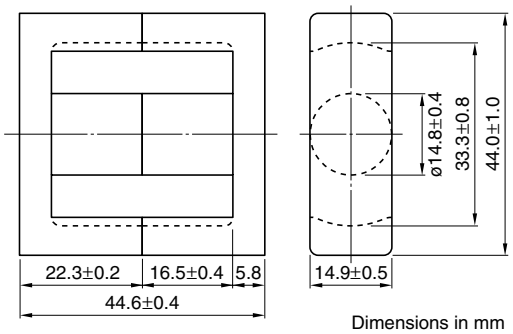
Temperature rise vs. Total loss for ETD39 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



ETD Series ETD44 Cores



Dimensions in mm

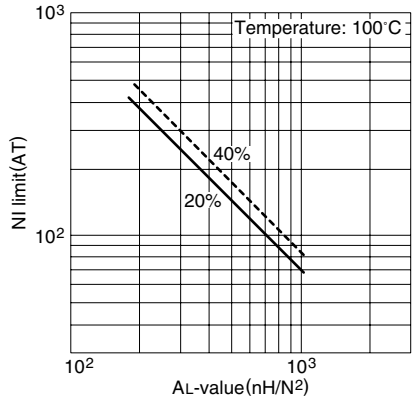
Parameter

Core factor	C1	mm^{-1}	0.589
Effective magnetic path length	ℓe	mm	103
Effective cross-sectional area	Ae	mm^2	175
Effective core volume	Ve	mm^3	18000
Cross-sectional center pole area	Acp	mm^2	172
Minimum cross-sectional center pole area	Acp min.	mm^2	163
Cross-sectional winding area of core	Acw	mm^2	305
Weight (approx.)		g	94

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD44-Z	4000±25% (1kHz, 0.5mA)* 5760 min. (100kHz, 200mT)	8.3 max.	523W (100kHz)

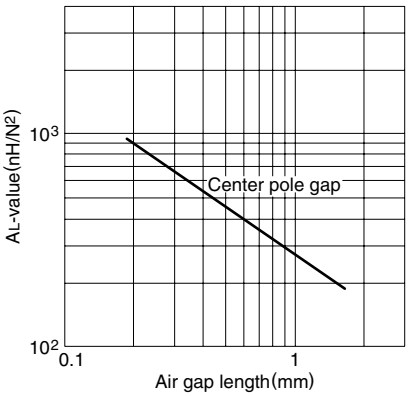
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD44 gapped core (Typical)



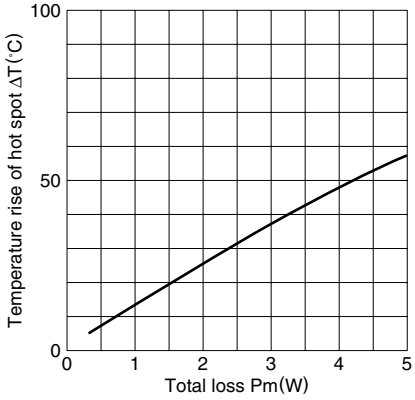
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD44 core (Typical)

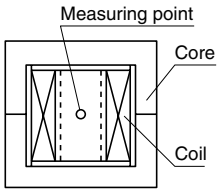


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

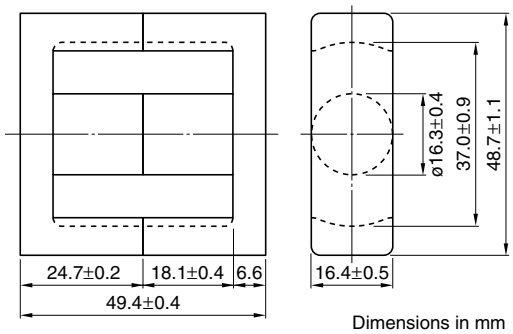
Temperature rise vs. Total loss for ETD44 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



ETD Series ETD49 Cores



Dimensions in mm

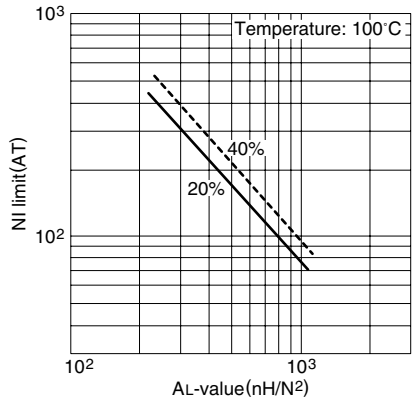
Parameter

Core factor	C1	mm^{-1}	0.535
Effective magnetic path length	ℓe	mm	114
Effective cross-sectional area	Ae	mm^2	213
Effective core volume	Ve	mm^3	24300
Cross-sectional center pole area	Acp	mm^2	209
Minimum cross-sectional center pole area	Acp min.	mm^2	199
Cross-sectional winding area of core	Acw	mm^2	375
Weight (approx.)		g	124

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD49-Z	4440±25% (1kHz, 0.5mA)* 6340 min. (100kHz, 200mT)	11.2 max.	682W (100kHz)

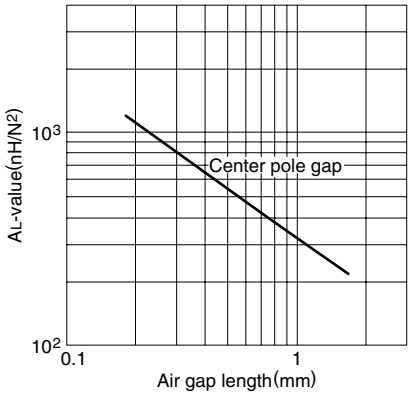
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD49 gapped core (Typical)



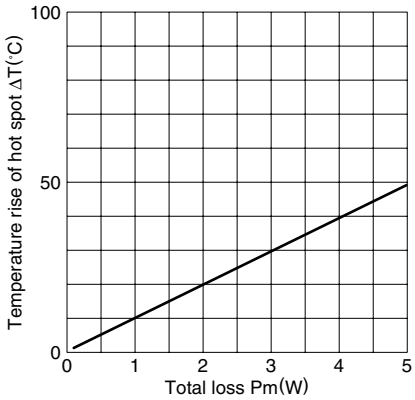
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD49 core (Typical)



Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD49 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)