

Ferrite for Switching Power Supplies

Low Loss Material PC47

PC47 has the best properties for transformers of power supplies, adapters and chargers.

The core loss and saturation magnetic flux density of PC47 are far better than PC44 and PC40 which are currently in use.

FEATURES

- Core loss: 250kW/m³ at 100kHz, 200mT, 100°C.
- Low core loss at wide frequency range 100kHz to 300kHz.
- Higher saturation flux density than PC44.

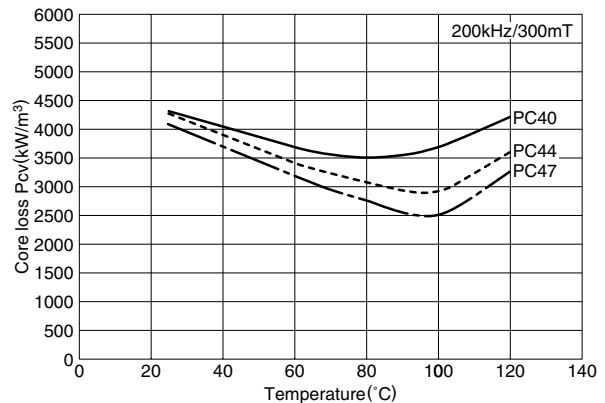
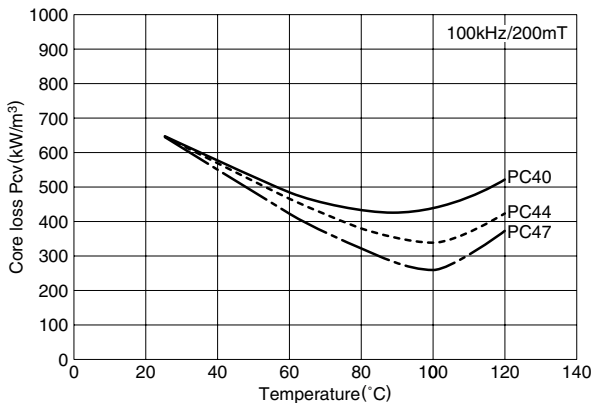
APPLICATIONS

- Switching power supplies
- Adapters and chargers for notebook type pc
- CCFL LCD backlight

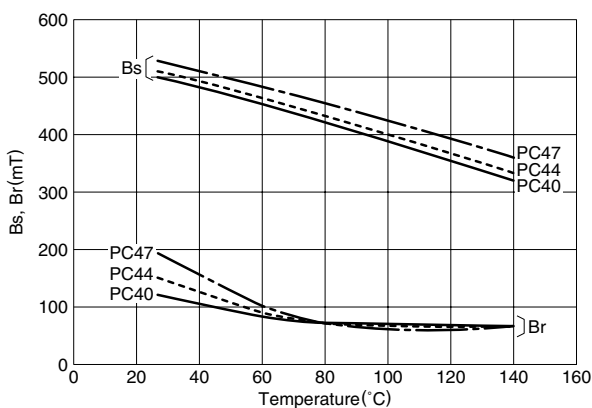
MATERIAL CHARACTERISTICS

Material			PC47	PC44	PC40
Initial permeability	μ	25°C	2500±25%	2400±25%	2300±25%
Core loss volume density [100kHz, 200mT]	P _{cv}	kW/m ³	25°C	600	600
			60°C	400	400
			100°C	250	300
Saturation magnetic flux density [1000A/m]	B _s	mT	25°C	530	510
			100°C	420	390
			25°C	180	110
Remanent flux density	B _r	mT	100°C	60	55
			25°C	180	110
Curie temperature	T _c	°C	min.	230	215
Density	db	kg/m ³		4.9×10 ³	4.8×10 ³

P_{cv} TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)

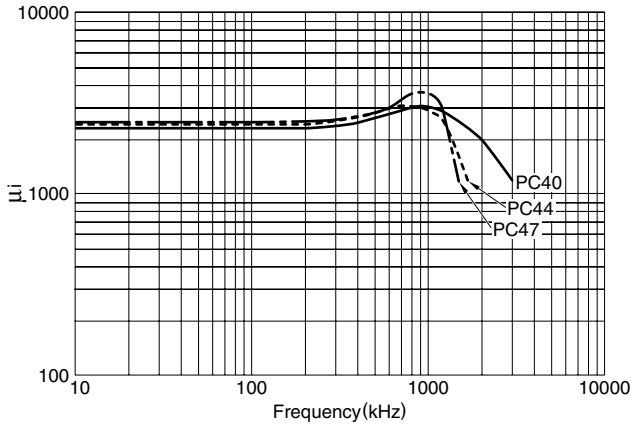


B_s and B_r TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)

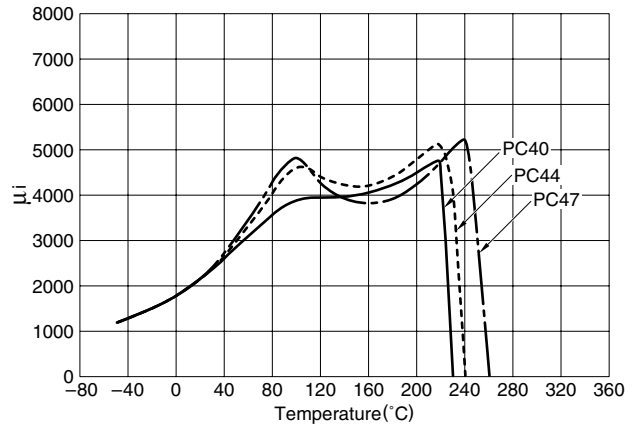


• All specifications are subject to change without notice.

μ_i vs. FREQUENCY CHARACTERISTICS (Typical)

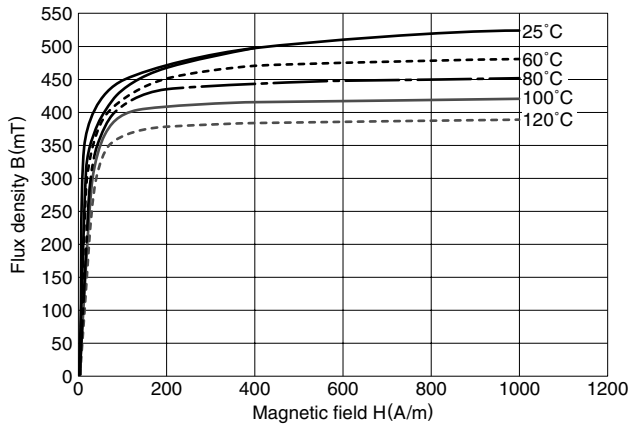


μ_i vs. TEMPERATURE CHARACTERISTICS (Typical)



MAGNETIZATION CURVES (Typical)

MATERIAL:PC47



μ_a TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)

