

Ferrite for Switching Power Supplies

SMD Cores

Cores

EE5, EE8.9/8

ER9.5/5, ER11/3.9, ER11/5

ER14.5/6

EEM12.7/13.7

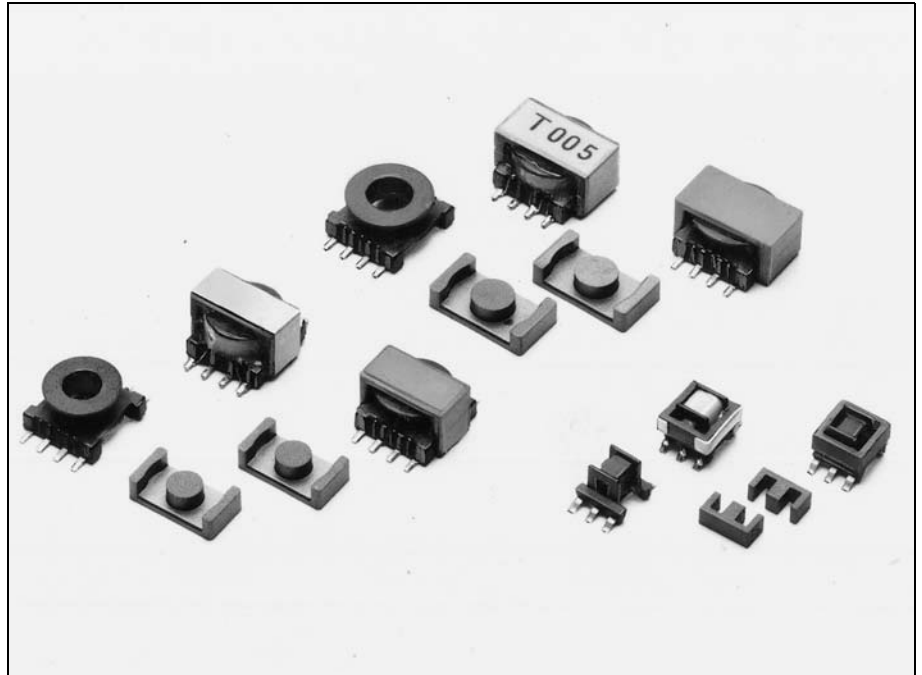
Bobbins

BE5, BE8.9/8

BER9.5/5, BER11/3.9, BER11/5

BER14.5/6

BEM12.7



Ordering Code System

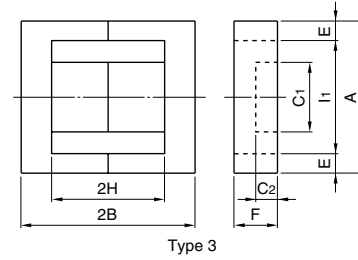
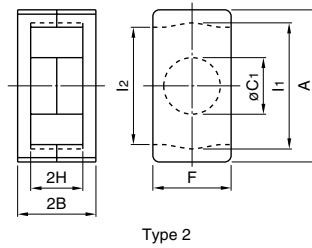
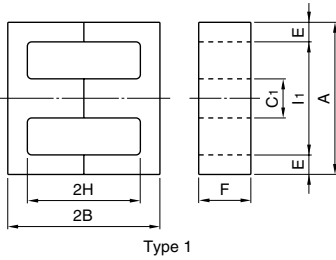
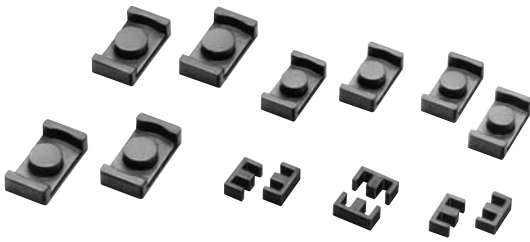
Cores

Material PC44 ER9.5/5 – A100 AL-value(Z: without air gap)
Size of E core

Bobbins

Symbol of Bobbin B ER9.5/5 – 118 GAFR Type of Terminal Pin
Size of E core Number of Terminal Pin
Code of Bobbin Material Number of Section

EE, ER AND EEM CORES

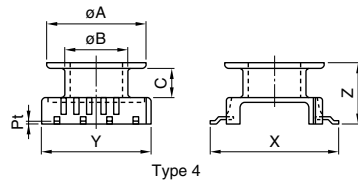
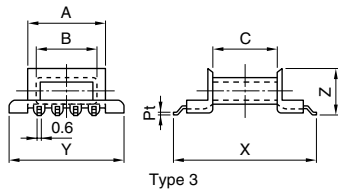
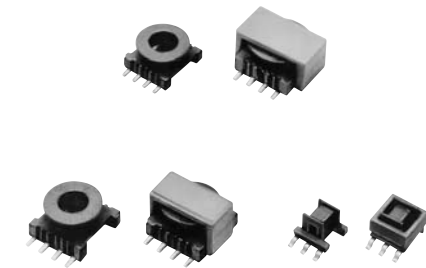


Part No.	Type	Dimensions in mm								
		A	2B	C1	C2	E	F	2H	I1	I2
PC44EE5-Z	1	5.25±0.05	5.3±0.1	1.35±0.05		0.70±0.05	1.95±0.05	4.0	3.85	
PC44EE8.9/8-Z	1	8.86±0.20	8.0±0.3	1.90±0.12		1.91±0.20	1.90±0.12	4.5±0.3	5.08 min.	
PC44ER9.5/5-Z PC50ER9.5/5-Z	2	9.35±0.15	4.9±0.1	3.4±0.1			4.9±0.1	3.35±0.15	7.63±0.13	7.0 min.
PC44ER11/3.9-Z PC50ER11/3.9-Z	2	10.83±0.18	3.85±0.10	4.13±0.13			5.9±0.1	2.10±0.15	8.85±0.15	7.9 min.
PC44ER11/5-Z PC50ER11/5-Z	2	10.83±0.18	4.9±0.1	4.13±0.13			5.9±0.1	3.15±0.15	8.85±0.15	7.9 min.
PC44ER14.5/6-Z PC50ER14.5/6-Z	2	14.5±0.2	5.9±0.1	4.7±0.1			6.7±0.1	3.3±0.2	11.8±0.2	11.8±0.2
PC44EEM12.7/13.7-Z PC50EEM12.7/13.7-Z	3	12.75±0.25	13.7±0.3	6.0±0.1	1.85±0.10	1.7±0.1	3.30±0.15	9.1±0.3	9.0 min.	

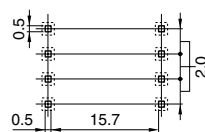
Part No.	Effective parameter				Electrical characteristics		Wt (g)	Bobbin item
	C1 (mm ⁻¹)	Ae (mm ²)	ℓ e (mm)	Ve (mm ³)	AL-value (nH/N ²)*			
					Without air gap	With air gap		
PC44EE5-Z	4.72	2.67	12.6	33.6	200 min.		0.2	BE5-916FFR
PC44EE8.9/8-Z	3.15	4.96	15.6	77.4	480±25%		0.6	BE8.9/8-118GFR
PC44ER9.5/5-Z PC50ER9.5/5-Z	1.68	8.47	14.2	120	610 min. 750±25%	63±5% 100±7%	0.6	BER9.5/5-118GAFR
PC44ER11/3.9-Z PC50ER11/3.9-Z	1.08	11.7	12.6	147	1040 min. 1100±25%	63±5% 100±7%	0.8	BER11/3.9-1110GAFR
PC44ER11/5-Z PC50ER11/5-Z	1.24	11.9	14.7	175	870 min. 960±25%	63±5% 100±7%	1.0	BER11/5-1110GAFR
PC44ER14.5/6-Z PC50ER14.5/6-Z	1.08	17.6	19.0	334	1280 min. 1150±25%	100±5% 160±7%	1.8	BER14.5/6-1110GAFR
PC44EEM12.7/13.7-Z PC50EEM12.7/13.7-Z	2.28	12.0	27.3	328	820±25% 580±25%	40±5% 63±7%	1.9	BEM12.7-118GAFR

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

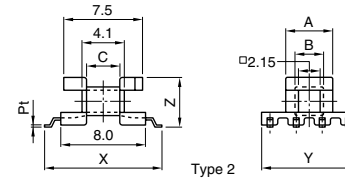
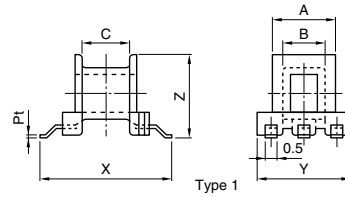
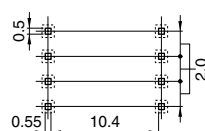
EE, ER AND EEM BOBBINS



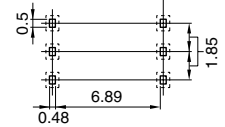
Pin layout
Item BEM12.7-118GAFR



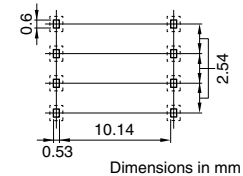
Pin layout
Item BER9.5/5-118GAFR



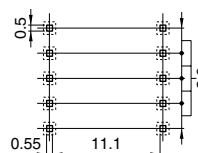
Pin layout
Item BE5-916FFR



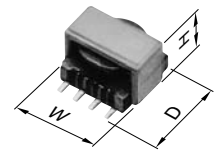
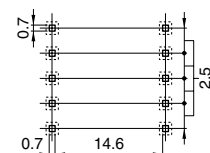
Pin layout
Item BE8.9/8-118GFR



Pin layout
Item BER11/5-1110GAFR
& (BER11/3.9-1110GAFR)



Pin layout
Item BER14.5/6-1110GAFR



Part No.	Type	Dimensions in mm						
		A	B	C	X	Y	Z	t**
BE5-916FFR BE5-926F1FR	1	3.50	2.30	2.70	7.85	5.20	4.70	0.35
BE8.9/8-118GFR	2	4.50	2.70	3.10	11.20	9.20	4.78	0.225
BEM12.7-118GAFR	3	8.90	6.90	7.50	16.70	12.80	4.90	0.30
BER9.5/5-118GAFR	4	7.30	4.45	2.15	11.50	8.20	4.45	0.35
BER11/3.9-1110GAFR	4	8.50	5.20	1.05	12.45	10.50	3.55	0.35
BER11/5-1110GAFR*	4	8.50	5.20	1.95	12.20	10.50	4.70	0.35
BER14.5/6-1110GAFR	4	11.40	5.90	2.00	16.00	14.00	5.85	0.30

Part No.	Dimensions in mm			Parameter		Material	Wt (g)	Accessory item
	Pt×Pw (mm)	Terminal pins	W D (mm) H	Aw (mm ²)	ℓ w (mm)			
BE5-916FFR BE5-926F1FR	0.2×0.5	6	5.7 7.8 4.8	1.62	12.4	Diallyl Phtalate	0.03 0.07	FE-5-A
BE8.9/8-118GFR	0.2×0.6	8	9.3 11.3 4.8	2.79	14.4	FR Phenol	0.17	—
BEM12.7-118GAFR	0.3×0.5	8	13.6 16.8 5.0	7.5	22.4	FR Phenol	0.31	FEM12.7/13.7-A
BER9.5/5-118GAFR	0.3×0.5	8	9.9 11.7 5.9	3.06	18.5	FR Phenol	0.16	FER9.5/5-A
BER11/3.9-1110GAFR	0.3×0.5	10	11.0 12.6 4.7	1.73	21.5	FR Phenol	0.21	FER11/3.9-A
BER11/5-1110GAFR**	0.3×0.5	10	11.5 12.3 6.4	3.22	21.5	FR Phenol	0.21	FER11/5-A
BER14.5/6-1110GAFR	0.4×0.7	10	15.1 16.2 7.3	5.5	27.2	FR Phenol	0.55	FER14.5/6-A

UL Grade: 94V-0, Material of pins: F, G types are Phosphor bronze wire (Solder plated), GA type is 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.

** 8-pin is available (Part No. BER11/5-118GAFR).