EPC-13_TDK.pdf

Ferrite Cores

EPC Series

For Power Supply and Signal Transformer
EPC Cores

CORE SHAPES AND DIMENSIONS/CHARACTERISTICS

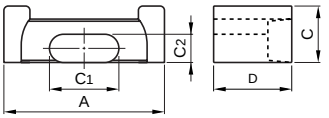


Fig.1

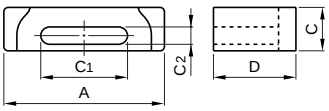


Fig.2

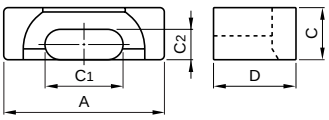


Fig.3

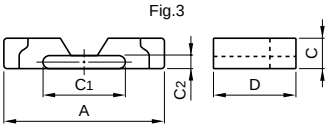
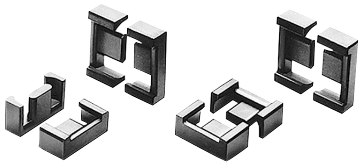


Fig.4



U.S.PAT.4,760,366
EP.PAT.245,083(DE,FR,GB,NL)
KS.UM50,836
TW.UM39,406
JP.PENDING

Type	Fig.	Dimensions (mm)					Ae	le	Weight
		A	C	C1	C2	D	(mm^2)	(mm)	(g)
EPC10	3	10.2±0.2	3.4±0.1	5±0.1	1.9±0.1	4.05±0.1	9.39	17.8	1.1
EPC13	1	13.25±0.3	4.6±0.15	5.6±0.15	2.05±0.1	6.6±0.2	12.5	30.6	2.1
EPC17	1	17.6±0.4	6±0.15	7.7±0.15	2.8±0.1	8.55±0.2	22.8	40.2	4.5
EPC19	1	19.1±0.4	6±0.15	8.5±0.15	2.5±0.1	9.75±0.2	22.7	46.1	5.3
EPC25	1	25.1±0.5	8±0.2	11.5±0.2	4±0.1	12.5±0.2	46.4	59.2	13
EPC25B	2	25.1±0.5	6.5±0.2	13.8±0.2	2.5±0.15	11.4±0.15	33.3	46.2	11
EPC27	1	27.1±0.5	8±0.2	13±0.3	4±0.1	16±0.2	54.6	73.1	18
EPC27N	4	27±0.4	5.1±0.1	13.85±0.15	2.2±0.1	13±0.1	33	55.9	10
EPC30	1	30.1±0.5	8±0.2	15±0.3	4±0.1	17.5±0.2	61	81.6	23

ELECTRICAL CHARACTERISTICS

WITHOUT AIR GAP

Part No.	AL-value (nH/N^2)	Calculated output power*(W)
PC44EPC10-Z	1000±25% [1kHz, 0.5mA, 100Ts]	5.4[100kHz]
PC50EPC10-Z	660±25% [1kHz, 0.5mA, 100Ts]	13[500kHz]
H5C3EPC10-Z	2660min. [10kHz, 10mV, 100Ts]	
PC44EPC13-Z	870±25% [1kHz, 0.5mA, 100Ts]	8.6[100kHz]
PC50EPC13-Z	560±25% [1kHz, 0.5mA, 100Ts]	19[500kHz]
H5C3EPC13-Z	2450min. [10kHz, 10mV, 100Ts]	
PC44EPC17-Z	1150±25% [1kHz, 0.5mA, 100Ts]	20[100kHz]
PC50EPC17-Z	740±25% [1kHz, 0.5mA, 100Ts]	35[500kHz]
PC44EPC19-Z	940±25% [1kHz, 0.5mA, 100Ts]	27[100kHz]
PC50EPC19-Z	680±25% [1kHz, 0.5mA, 100Ts]	55[500kHz]
PC44EPC25-Z	1560±25% [1kHz, 0.5mA, 100Ts]	63[100kHz]
PC50EPC25-Z	1080±25% [1kHz, 0.5mA, 100Ts]	127[500kHz]
PC44EPC25B-Z	1560±25% [1kHz, 0.5mA, 100Ts]	45[100kHz]
PC50EPC25B-Z	1080±25% [1kHz, 0.5mA, 100Ts]	87[500kHz]
PC44EPC27-Z	1540±25% [1kHz, 0.5mA, 100Ts]	80[100kHz]
PC50EPC27-Z	1030±25% [1kHz, 0.5mA, 100Ts]	161[500kHz]
PC44EPC27N-Z	1400±25% [1kHz, 0.5mA, 100Ts]	43[100kHz]

* The values were obtained with forward converter mode.

WITHOUT AIR GAP

Part No.	AL-value (nH/N^2)	Calculated output power *(W)
PC44EPC30-Z	1570±25% [1kHz, 0.5mA, 100Ts]	85[100kHz]
PC50EPC30-Z	1060±25% [1kHz, 0.5mA, 100Ts]	180[500kHz]

* The values were obtained with forward converter mode.

WITH AIR GAP

Part No.	AL-value (nH/N^2)[1kHz, 0.5mA, 100Ts]
PC44EPC10AXXX*	40±7%, 63±10%
PC50EPC10AXXX	40±7%, 63±10%
PC44EPC13AXXX	40±4%, 63±5%
PC50EPC13AXXX	40±4%, 63±5%
PC44EPC17AXXX	80±4%, 125±5%
PC50EPC17AXXX	80±4%, 125±5%
PC44EPC19AXXX	80±4%, 125±5%
PC50EPC19AXXX	80±4%, 125±5%
PC44EPC25AXXX	125±5%, 200±7%
PC50EPC25AXXX	125±5%, 200±7%
PC44EPC25BAXXX	80±5%, 125±7%
PC50EPC25BAXXX	80±5%, 125±7%
PC44EPC27AXXX	125±5%, 200±7%
PC50EPC27AXXX	125±5%, 200±7%
PC44EPC27NAXXX	80±5%, 125±7%
PC44EPC30AXXX	125±5%, 200±7%
PC50EPC30AXXX	125±5%, 200±7%

* XXX: AL-value

TDK

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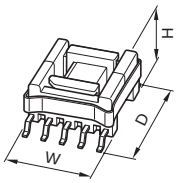
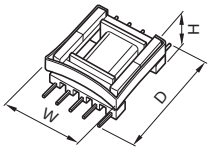
BOBBINS

SURFACE MOUNT TYPE



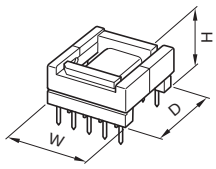
Part No.	No. of lead terminal	Dimensions (mm)			Clamp*
		W	D	H	
BEPC-10-118GA	8	11	11.7	5.2	FEPC-10-A
BEPC-13-1110GA	10	14.2	20.6	7.3	FEPC-13-A
BEPC-17-119GA	9	18.2	23.2	9.9	FEPC-17-A
BEPC-19-1110GA	10	20.2	25.2	9.9	FEPC-19-A
BEPC-25B-1111G	11	26.1	28.9	9.9	FEPC-25B-A

DROP-IN TYPE



Part No.	No. of pin terminal	Dimensions (mm)			Clamp*
		W	D	H	
BEPC-19-1110SA	10	20.2	26.2	9.8	FEPC-19-A
BEPC-25B-1111S	11	26	37.9	9.5	FEPC-25B-A

LEAD-THROUGH TYPE



Part No.	No. of pin terminal	Dimensions (mm)			Clamp*
		W	D	H	
BEPC-13-1110CPH	10	13.9	14.8	7.7	FEPC-13-A
BEPC-17-1110CPH	10	18.2	19.1	12.1	FEPC-17-A
BEPC-19-1111CPH	11	20	21.5	12.1	FEPC-19-A
BEPC-25-1111CPH	11	26.1	27	16.2	FEPC-25-A
BEPC-27-1111CPH	11	28.1	34	16.2	FEPC-27-A
BEPC-27N-1114CPH	14	29	36.5	9	FEPC-27-A
BEPC-30-1112CPH	12	31.1	37	16.2	FEPC-30-A

* Clamp material: Stainless steel

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