EE14/7, EE18/8, EE22/11, EE32/13, EE38/16, EE43/19, EE64/21
EI 14/5, EI 18/6, EI 22/7, EI 32/10, E 64/15
ER9.5, ER11, ER14.5

Planar EE and EI cores, with their low profile are suitable for board level installation allowing assembly without the need for plastic coilformers and can also allow windings integrated into multi-level PCBs. Planar ER cores with their low mass and low profile are suitable for Surface Mount installations in low power filter and transformer applications.

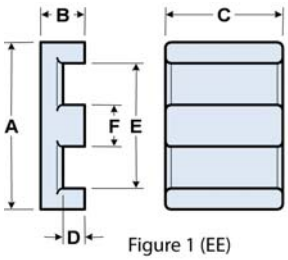

Figure 1 (EE)

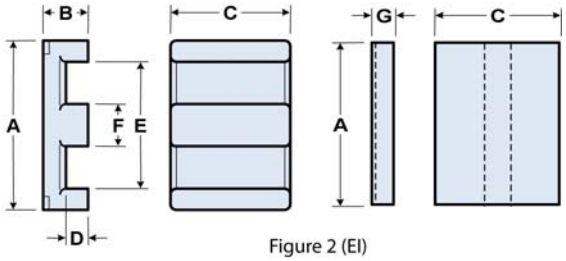

Figure 2 (EI)

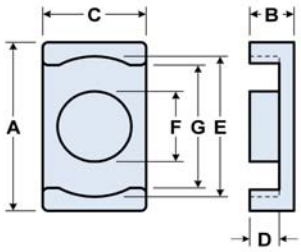

Figure 3 (ER Type 1)

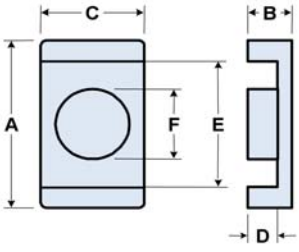

Figure 4 (ER Type 2)

- Planar EE, ER and EI cores can be supplied with the center post gapped to a mechanical dimension, or an A_L value.
- A_L value is measured at 1 kHz, B < 10 gauss.
- Weight indicated is per pair or set.

Planar Cores

Quick Link: *www.fair-rite.com/planar*

Legend: Symbols & Definition

Dimensions (Top numbers are in millimeters, bottom numbers are in nominal inches.)

$\Sigma\ell/A$: *Core Constant,* ℓ_e: *Effective Path Length,* A_e: *Effective Cross-Sectional Area,* V_e: *Effective Core Volume,* A_L: *Inductance Factor* $(\frac{L}{N^2})$

Explanation of part numbers: Digits 1 & 2 = product class, 3 & 4 = material grade.

Dimensions

Row #	Part Number	Fig.	Generic Size	A	B	C	D	E	F	G	Wt. (g) per Set
(1)	9478201002 9498201002 9495201002	1	EE14/7	14.00 ± 0.3 0.551	3.50 ± 0.1 0.138	5.00 ± 0.15 0.197	1.90 min 0.075 min	10.52 min 0.414 min	3.00 ± 0.3 0.118		1.20
(2)	9478202002 9498202002 9495202002	1	EE18/8	18.00 ± 0.4 0.709	4.00 ± 0.1 0.157	10.00 ± 0.2 0.394	1.80 min 0.071 min	13.70 min 0.539 min	4.00 ± 0.1 0.157		4.80
(3)	9478203002 9498203002 9495203002	1	EE22/11	21.80 ± 0.4 0.858	5.70 ± 0.2 0.224	15.80 ± 0.35 0.622	3.20 ± 0.2 0.126	16.80 ± 0.4 0.661	5.00 ± 0.2 0.197		13.00
(4)	9478204002 9498204002 9495204002	1	EE32/13	31.75 ± 0.65 1.250	6.35 ± 0.2 0.250	20.35 ± 0.45 0.801	3.18 ± 0.2 0.125	24.50 min 0.965 min	6.35 ± 0.15 0.250		26.00
(5)	9478205002 9498205002 9495205002	1	EE38/16	38.10 ± 0.8 1.500	8.25 ± 0.25 0.325	25.40 ± 0.5 1.000	4.45 ± 0.25 0.175	30.23 min 1.190 min	7.60 ± 0.2 0.299		50.00
(6)	9478206002 9498206002 9495206002	1	EE43/19	43.20 ± 0.6 1.701	9.55 ± 0.3 0.376	27.90 ± 0.4 1.098	5.70 ± 0.3 0.224	34.40 min 1.354 min	8.15 ± 0.3 0.321		70.00
(7)	9478207002 9498207002 9495207002	1	EE64/21	64.00 ± 1 2.520	10.35 ± 0.15 0.407	51.00 ± 0.8 2.008	5.30 ± 0.25 0.209	53.80 ± 1 2.118	10.30 ± 0.2 0.406		200.00
(8)	7878400121 7898400121 7895400121	2	EI 14/5	14.00 ± 0.3 0.551	3.50 ± 0.1 0.138	5.00 ± 0.15 0.197	1.90 min 0.075 min	10.52 min 0.414 min	3.00 ± 0.1 0.118	1.80 ± 0.1 0.071	1.10
(9)	7878400221 7898400221 7895400221	2	EI 18/6	18.00 ± 0.35 0.709	4.00 ± 0.15 0.157	10.00 ± 0.3 0.394	1.80 min 0.071 min	13.70 min 0.539 min	4.00 ± 0.2 0.157	2.40 ± 0.15 0.094	4.10
(10)	7878400321 7898400321 7895400321	2	EI 22/8	21.80 ± 0.4 0.858	5.70 ± 0.15 0.224	15.80 ± 0.35 0.622	3.20 ± 0.15 0.126	16.80 ± 0.4 0.661	5.00 ± 0.2 0.197	2.50 ± 0.15 0.098	10.50
(11)	7878400421 7898400421 7895400421	2	EI 32/10	31.75 ± 0.5 1.250	6.35 ± 0.15 0.250	20.32 ± 0.4 0.800	3.18 ± 0.15 0.125	24.50 min 0.965 min	6.35 ± 0.2 0.250	3.18 ± 0.15 0.125	24.00
(12)	7878400721 7898400721 7895400721	2	EI 64/15	64.00 ± 1 2.520	10.35 ± 0.15 0.407	51.00 ± 0.8 2.008	5.30 ± 0.25 0.209	53.80 ± 1 2.118	10.30 ± 0.2 0.406	5.08 ± 0.2 0.200	178.00
(13)	9578100502 9598100502 9595100502	3	ER9.5	9.35 ± 0.3 0.368	2.45 ± 0.15 0.096	4.90 ± 0.2 0.193	1.68 ± 0.11 0.066	7.65 ± 0.3 0.301	3.40 ± 0.15 0.134	7.00 min 0.276 min	0.70
(14)	9578110502 9598110502 9595110502	3	ER11	10.80 ± 0.3 0.425	2.45 ± 0.15 0.096	5.90 ± 0.2 0.232	1.58 ± 0.16 0.062	8.85 ± 0.3 0.348	4.15 ± 0.2 0.163	7.90 min 0.312 min	1.00
(15)	9578150602 9598150602 9595150602	4	ER14.5	14.50 ± 0.2 0.571	2.95 ± 0.1 0.116	6.70 ± 0.1 0.264	1.65 ± 0.1 0.065	11.80 ± 0.2 0.465	4.70 ± 0.1 0.185	n/a n/a	1.80

Magnetic Core Parameters

Table Continued ...

Row #	Part Number	$\sum \ell/A (cm^{-1})$	ℓ_e(cm)	$A_e(cm^2)$	$V_e(cm^3)$	$A_{min}(cm^2)$	A_L(nH)
(1)	9478201002 9498201002 9495201002	13.40	2.01	0.153	0.315	0.15	1050 ±25% 1100 ±25% 1300 ±25%
(2)	9478202002 9498202002 9495202002	6.00	2.43	0.395	0.96	0.39	2600 ±25% 2700 ±25% 3300 ±25%
(3)	9478203002 9498203002 9495203002	4.10	3.24	0.79	2.56	0.79	4500 ±25% 4600 ±25% 5500 ±25%
(4)	9478204002 9498204002 9495204002	3.20	4.17	1.29	5.38	1.27	6200 ±25% 6400 ±25% 7600 ±25%
(5)	9478205002 9498205002 9495205002	3.00	5.29	1.90	10.10	1.80	8200 ±25% 8800 ±25% 10100 ±25%
(6)	9478206002 9498206002 9495206002	2.80	6.21	2.21	13.70	2.15	7300 ±25% 7200 ±25% 9500 ±25%
(7)	9478207002 9498207002 9495207002	1.54	8.07	5.20	41.50	5.15	14800 ±25% 14800 ±25% 18000 ±25%
(8)	7878400121 7898400121 7895400121	10.90	1.66	0.152	0.252	0.15	1440 ±25% 1440 ±25% 1600 ±25%
(9)	7878400221 7898400221 7895400221	4.90	2.05	0.421	0.863	0.40	3200 ±25% 3300 ±25% 3800 ±25%
(10)	7878400321 7898400321 7895400321	3.30	2.61	0.79	2.06	0.79	5400 ±25% 5500 ±25% 6200 ±25%
(11)	7878400421 7898400421 7895400421	2.70	3.52	1.30	4.57	1.29	7200 ±25% 7300 ±25% 8700 ±25%
(12)	7878400721 7898400721 7895400721	1.40	7.00	5.18	36.30	5.15	16900 ±25% 18000 ±25% 22200 ±25%
(13)	9578100502 9598100502 9595100502	15.20	1.361	0.0893	0.122	0.076	900 ±25% 900 ±25% 950 ±25%
(14)	9578110502 9598110502 9595110502	11.20	1.40	0.126	0.177	0.103	1200 ±25% 1250 ±25% 1350 ±25%
(15)	9578150602 9598150602 9595150602	10.80	1.90	0.176	0.333	0.17	1400 ±25% 1430 ±25% 1610 ±25%