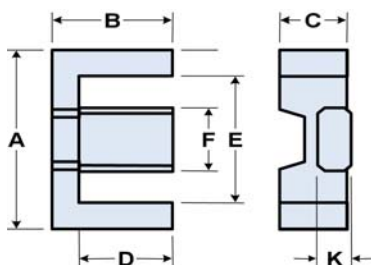


## EFD10, EFD12, EFD15, EFD20, EFD25, EFD30

EFD (Economical Flat Design) cores have been designed to maximize volume in a low profile geometry. EFD cores allow maximum throughput power density with reasonably low mass for board level installation.



- EFD 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.

Legend: Symbols & Definition

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

$\Sigma \ell/A$ : Core Constant,  $\ell_e$ : 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	Generic Size	A	B	C	D	E	F	K	Wt. (g) per Set
(1)	8978101021 8998101021 8995101021	EFD10	10.50 ± 0.3 0.413	5.20 ± 0.15 0.205	2.70 ± 0.2 0.106	3.75 ± 0.15 0.148	7.65 ± 0.3 0.301	4.55 ± 0.2 0.179	1.45 ± 0.1 0.057	0.90
(2)	8978121221 8998121221 8995121221	EFD12	12.50 ± 0.35 0.492	6.20 ± 0.15 0.244	3.50 ± 0.2 0.138	4.55 ± 0.15 0.179	9.00 ± 0.35 0.354	5.40 ± 0.2 0.213	2.00 ± 0.1 0.079	1.80
(3)	8978151521 8998151521 8995151521	EFD15	15.00 ± 0.4 0.591	7.50 ± 0.15 0.295	4.65 ± 0.2 0.183	5.50 ± 0.15 0.217	11.00 ± 0.4 0.433	5.30 ± 0.2 0.209	2.40 ± 0.1 0.094	2.80
(4)	8978202021 8998202021 8995202021	EFD20	20.00 ± 0.55 0.787	10.00 ± 0.25 0.394	6.65 ± 0.2 0.262	7.70 ± 0.25 0.303	15.40 ± 0.5 0.606	8.90 ± 0.3 0.350	3.60 ± 0.15 0.142	7.00
(5)	8978252521 8998252521 8995252521	EFD25	25.00 ± 0.5 0.984	12.50 ± 0.25 0.492	9.10 ± 0.3 0.358	9.30 ± 0.25 0.366	18.70 ± 0.6 0.736	11.40 ± 0.2 0.449	5.20 ± 0.2 0.205	16.00
(6)	8978303021 8998303021 8995303021	EFD30	30.00 ± 0.8 1.181	15.00 ± 0.25 0.591	9.10 ± 0.3 0.358	11.20 ± 0.3 0.441	22.40 ± 0.75 0.882	14.60 ± 0.3 0.575	4.90 ± 0.2 0.193	24.00

Quick Link: [www.fair-rite.com/efd](http://www.fair-rite.com/efd)

## Magnetic Core Parameters

Table Continued ...

Row #	Part Number	$\sum lA(\text{cm}^{-1})$	$l_e(\text{cm})$	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_{\min}(\text{cm}^2)$	$A_L(\text{nH})$
(1)	8978101021 8998101021 8995101021	32.70	2.36	0.072	0.171	0.066	530 ±25% 540 ±25% 610 ±25%
(2)	8978121221 8998121221 8995121221	25.90	2.84	0.11	0.311	0.108	710 ±25% 730 ±25% 850 ±25%
(3)	8978151521 8998151521 8995151521	22.30	3.44	0.154	0.531	0.127	880 ±25% 910 ±25% 1050 ±25%
(4)	8978202021 8998202021 8995202021	15.60	4.74	0.31	1.44	0.29	1200 ±25% 1200 ±25% 1400 ±25%
(5)	8978252521 8998252521 8995252521	10.40	5.88	0.58	3.32	0.55	2200 ±25% 2250 ±25% 2650 ±25%
(6)	8978303021 8998303021 8995303021	11.30	6.93	0.69	4.26	0.66	2800 ±25% 2150 ±25% 2800 ±25%