RM4, RM5, RM6, RM8, RM10, RM12, RM14

RM (Rectangular Modulus) cores allow better shielding than E type geometries while also providing easier winding accessibility and better power dissipation than a pot core configuration. Fair-Rite's standard RM cores all have a solid center post and standard height, low profile and alternate materials are available upon request.

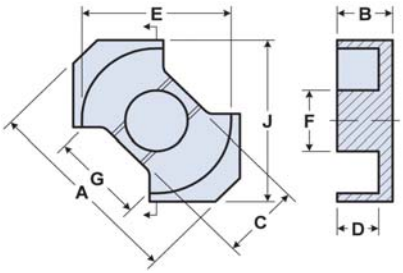

Figure 1

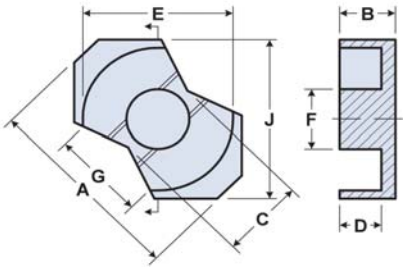

Figure 2

- RM 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,* 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	J	Wt. (g) per Set
(1)	6278110121 6298110121 6295110121	1	RM4	10.75 ± 0.25 0.423	5.25 ± 0.1 0.207	4.50 ± 0.1 0.177	3.65 ± 0.15 0.144	8.15 ± 0.2 0.321	3.80 ± 0.1 0.150	5.80 min 0.228 min	9.60 ± 0.2 0.378	1.70
(2)	6278140121 6298140121 6295140121	1	RM5	14.30 ± 0.3 0.563	5.20 ± 0.1 0.205	6.60 ± 0.2 0.260	3.25 ± 0.15 0.128	10.40 ± 0.2 0.409	4.80 ± 0.1 0.189	6.00 min 0.236 min	12.05 ± 0.25 0.474	3.20
(3)	6278180121 6298180121 6295180121	2	RM6	17.60 ± 0.3 0.693	6.20 ± 0.1 0.244	7.90 ± 0.3 0.311	4.25 ± 0.15 0.167	12.65 ± 0.25 0.498	6.25 ± 0.15 0.246	8.40 min 0.331 min	14.40 ± 0.3 0.567	5.50
(4)	6278230121 6298230121 6295230121	1	RM8	22.75 ± 0.45 0.896	8.20 ± 0.1 0.323	10.80 ± 0.2 0.425	5.50 ± 0.15 0.217	17.30 ± 0.3 0.681	8.40 ± 0.15 0.331	9.80 min 0.386 min	19.10 ± 0.4 0.752	13.00
(5)	6278280121 6298280121 6295280121	1	RM10	27.80 ± 0.6 1.094	9.30 ± 0.15 0.366	13.25 ± 0.25 0.522	6.40 ± 0.2 0.252	21.65 ± 0.45 0.852	10.65 ± 0.2 0.419	12.50 min 0.492 min	24.15 ± 0.55 0.951	22.00
(6)	6278370121 6298370121 6295370121	1	RM12	36.75 ± 0.75 1.447	12.25 ± 0.15 0.482	15.85 ± 0.25 0.624	8.55 ± 0.2 0.337	25.45 ± 0.55 1.002	12.60 ± 0.2 0.496	13.40 min 0.528 min	29.20 ± 0.6 1.150	46.00
(7)	6278420121 6298420121 6295420121	1	RM14	41.60 ± 0.6 1.638	15.05 ± 0.1 0.593	18.70 ± 0.3 0.736	10.55 ± 0.2 0.415	29.50 ± 0.5 1.161	14.75 ± 0.25 0.581	17.00 min 0.669 min	34.15 ± 0.65 1.344	69.00

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)	6278110121 6298110121 6295110121	17.60	2.38	0.134	0.319	0.113	900 ±25% 1020 ±25% 1130 ±25%
(2)	6278140121 6298140121 6295140121	10.30	2.39	0.233	0.555	0.181	1650 ±25% 1770 ±25% 2100 ±25%
(3)	6278180121 6298180121 6295180121	9.30	3.10	0.342	1.06	0.312	2000 ±25% 2470 ±25% 2600 ±25%
(4)	6278230121 6298230121 6295230121	6.70	4.03	0.60	2.419	0.554	3000 ±25% 3100 ±25% 3500 ±25%
(5)	6278280121 6298280121 6295280121	5.30	4.79	0.898	4.306	0.884	4200 ±25% 4300 ±25% 4900 ±25%
(6)	6278370121 6298370121 6295370121	4.30	6.13	1.41	8.675	1.247	5400 ±25% 5500 ±25% 6360 ±25%
(7)	6278420121 6298420121 6295420121	3.80	7.38	1.95	14.37	1.709	6200 ±25% 6200 ±25% 7500 ±25%