Pot Cores

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

P9/5S, P11/7S, P14/8, P18/11, P22/13, P26/16, P30/19, P36/22

Pot cores have found application in all types of inductive devices. The core configuration provides a high degree of self-shielding. It also facilitates gapping to enhance utility for a variety of magnetic designs.

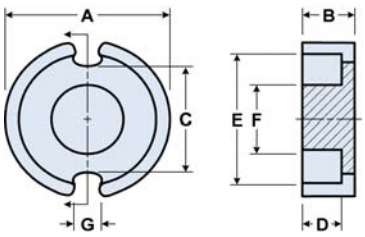

Figure 1

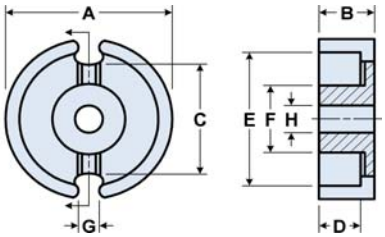

Figure 2

- Pot 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	H	Wt. (g) per Set
(1)	5678090621 5698090621 5695090621	1	P9/5S	9.15 ±0.15 0.360	2.65 ±0.1 0.104	5.65 ±0.15 0.222	1.80 min 0.071 min	7.50 min 0.295 min	3.80 ±0.1 0.150	2.10 ±0.3 0.083		1.00
(2)	5678110821 5698110821 5695110821	1	P11/7S	11.10 ±0.2 0.437	3.30 ±0.1 0.130	6.80 ±0.25 0.268	2.30 ±0.15 0.091	9.20 ±0.2 0.362	4.60 ±0.1 0.181	2.20 ±0.3 0.087		1.90
(3)	5678140921 5698140921 5695140921	2	P14/8	14.00 ±0.3 0.551	4.20 ±0.2 0.165	9.55 ±0.3 0.376	3.10 ±0.2 0.122	11.80 ±0.4 0.465	5.90 ±0.2 0.232	3.30 ±0.6 0.130	2.90 ±0.3 0.114	3.20
(4)	5678181221 5698181221 5695181221	2	P18/11	18.00 ±0.4 0.709	5.35 ±0.15 0.211	13.40 ±0.4 0.528	3.80 ±0.2 0.150	14.90 min 0.587 min	7.45 ±0.15 0.293	4.00 ±0.3 0.157	3.20 ±0.2 0.126	6.00
(5)	5678221421 5698221421 5695221421	2	P22/13	21.60 ±0.4 0.850	6.70 ±0.1 0.264	14.90 ±1.6 0.587	4.70 ±0.15 0.185	18.20 ±0.4 0.717	9.25 ±0.15 0.364	3.70 ±0.7 0.146	4.55 ±0.15 0.179	12.00
(6)	5678261721 5698261721 5695261721	2	P26/16	25.50 ±0.5 1.004	8.05 ±0.15 0.317	17.20 ±0.5 0.677	5.65 ±0.2 0.222	21.60 ±0.4 0.850	11.10 ±0.3 0.437	4.15 ±0.5 0.163	5.40 ±0.25 0.213	20.00
(7)	5678302021 5698302021 5695302021	2	P30/19	30.00 ±0.5 1.181	9.40 ±0.2 0.370	20.60 min 0.811 min	6.60 ±0.2 0.260	25.00 min 0.984 min	13.30 ±0.2 0.524	3.68 min 0.145 min	5.60 ±0.2 0.220	34.00
(8)	5678362321 5698362321 5695362321	2	P36/22	35.60 ±0.6 1.402	10.90 ±0.2 0.429	26.20 ±0.6 1.031	7.60 ±0.3 0.299	29.50 min 1.161 min	15.90 ±0.3 0.626	5.15 ±0.4 0.203	5.45 ±0.25 0.215	54.00

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)	5678090621 5698090621 5695090621	12.00	1.35	0.112	0.152	0.09	1300 ±25% 1250 ±25% 1400 ±25%
(2)	5678110821 5698110821 5695110821	9.50	1.65	0.173	0.284	0.145	1680 ±25% 1750 ±25% 1900 ±25%
(3)	5678140921 5698140921 5695140921	7.90	1.98	0.251	0.495	0.198	1950 ±25% 1950 ±25% 2100 ±25%
(4)	5678181221 5698181221 5695181221	6.00	2.59	0.43	1.12	0.36	2600 ±25% 2700 ±25% 3400 ±25%
(5)	5678221421 5698221421 5695221421	4.80	3.12	0.648	2.00	0.51	4000 ±25% 4100 ±25% 5000 ±25%
(6)	5678261721 5698261721 5695261721	4.40	3.80	0.867	3.31	0.74	4800 ±25% 5000 ±25% 5500 ±25%
(7)	5678302021 5698302021 5695302021	3.56	4.53	1.27	5.75	1.14	5700 ±25% 5800 ±25% 7500 ±25%
(8)	5678362321 5698362321 5695362321	2.90	5.53	1.84	9.78	1.64	8300 ±25% 8500 ±25% 10000 ±25%