



## SEP1707E SERIES ~

### High Current SMD Power Inductors



RoHS Compliant

#### PART NUMBERING SYSTEM

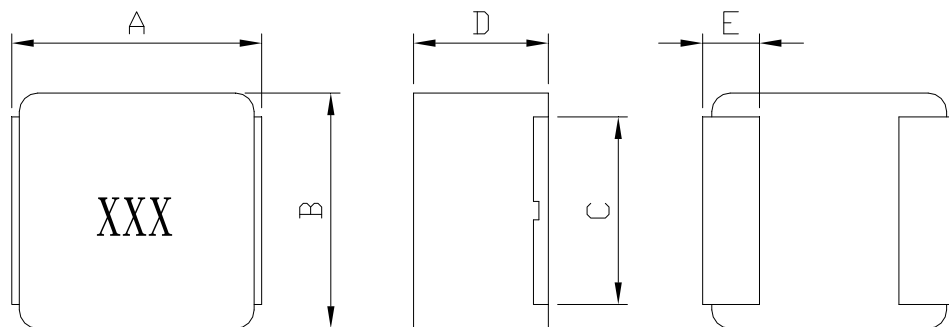
<u>SEP</u>	<u>1707E</u>	—	<u>1R0M</u>	—	<u>LF</u>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

#### FEATURES :

- \* Magnetically shielded low DC resistance .
- \* Frequency range up to 750 kHz .
- \* Handles high transient current spikes without saturation.
- \* Ultra low buzz noise, due to composite construction
- \* Application for DC/DC converter and PDA/notebook/desktop/server .

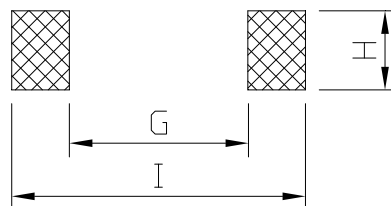
#### SHAPES AND DIMENSIONS :

UNIT : mm



A=17.45 Max. B=17.15 Max. C=11.94±0.3 D=7.0 Max. E=2.11±0.3

#### RECOMMENDED PATTERNS



G=11.68 H= 12.19 I= 18.03



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### SPECIFICATION TABLE

PART NUMBER	INDUCTANCE ( $\mu$ H)	Isat ( A ) (Typ.)	Irms ( A ) ( $\Delta$ t) 40°C (Typ.)	DCR (m $\Omega$ ) (Max.)	DCR (m $\Omega$ ) (Typ.)	Test Freq. (KHz)
SEP1707E-R33M-LF	0.33 $\pm$ 20%	55.0	75.5	0.67	0.61	100KHz/0.25V
SEP1707E-R47M-LF	0.47 $\pm$ 20%	62.0	64.5	0.87	0.78	100KHz/0.25V
SEP1707E-R56M-LF	0.56 $\pm$ 20%	66.0	61.0	0.91	0.83	100KHz/0.25V
SEP1707E-R82M-LF	0.82 $\pm$ 20%	45.0	56.5	1.08	0.98	100KHz/0.25V
SEP1707E-1R0M-LF	1.00 $\pm$ 20%	32.0	55.5	1.27	1.22	100KHz/0.25V
SEP1707E-1R5M-LF	1.50 $\pm$ 20%	31.0	48.0	1.62	1.54	100KHz/0.25V
SEP1707E-2R2M-LF	2.20 $\pm$ 20%	28.0	43.5	1.98	1.85	100KHz/0.25V
SEP1707E-3R3M-LF	3.30 $\pm$ 20%	27.0	35.0	2.93	2.79	100KHz/0.25V
SEP1707E-4R7M-LF	4.70 $\pm$ 20%	21.0	30.0	4.18	3.98	100KHz/0.25V
SEP1707E-5R6M-LF	5.60 $\pm$ 20%	21.0	28.0	4.44	4.23	100KHz/0.25V
SEP1707E-6R8M-LF	6.80 $\pm$ 20%	18.5	22.5	6.15	5.86	100KHz/0.25V
SEP1707E-8R2M-LF	8.20 $\pm$ 20%	18.0	21.0	8.10	7.71	100KHz/0.25V
SEP1707E-100M-LF	10.0 $\pm$ 20%	17.0	19.0	9.33	8.89	100KHz/0.25V
SEP1707E-150M-LF	15.0 $\pm$ 20%	12.0	14.0	14.4	13.7	100KHz/0.25V
SEP1707E-220M-LF	22.0 $\pm$ 20%	9.5	12.0	21.0	20.0	100KHz/0.25V
SEP1707E-330M-LF	33.0 $\pm$ 20%	9.0	10.7	37.0	35.1	100KHz/0.25V
SEP1707E-470M-LF	47.0 $\pm$ 20%	8.6	8.7	42.7	40.7	100KHz/0.25V
SEP1707E-560M-LF	56.0 $\pm$ 20%	4.2	7.2	57.8	55.0	100KHz/0.25V
SEP1707E-680M-LF	68.0 $\pm$ 20%	4.5	6.1	75.7	72.1	100KHz/0.25V
SEP1707E-820M-LF	82.0 $\pm$ 20%	4.5	5.5	91.7	87.3	100KHz/0.25V
SEP1707E-101M-LF	100.0 $\pm$ 20%	4.0	5.0	110.0	105.0	100KHz/0.25V

- Operating temperature range - 55 °C to + 125 °C
- I sat : DC current (A) that will cause L0 to drop approximately 20 %
- I rms : DC current (A) that will cause an approximate  $\Delta$ T of 40 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions.



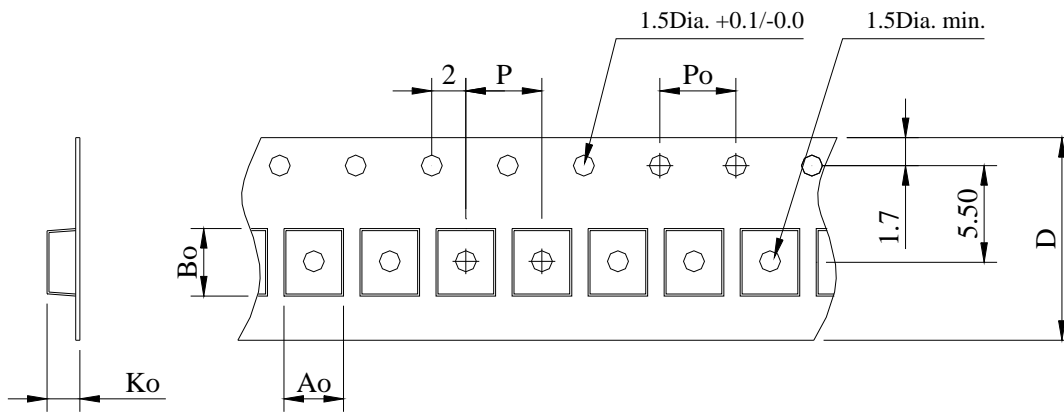
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#### PACKAGING SPECIFICATION



STAYLE	Q' TY (PCS)	DIMENSIONS (m/m)					
		$A_o$	$B_o$	$K_o$	$P$	$P_o$	$D \pm 0.3$
13"	250	17.5	18.0	7.5	20	4.0	24