



## SEP0502EB SERIES ~ High Current Power Inductors



### PART NUMBERING SYSTEM

**AEC-Q<sub>200</sub>**

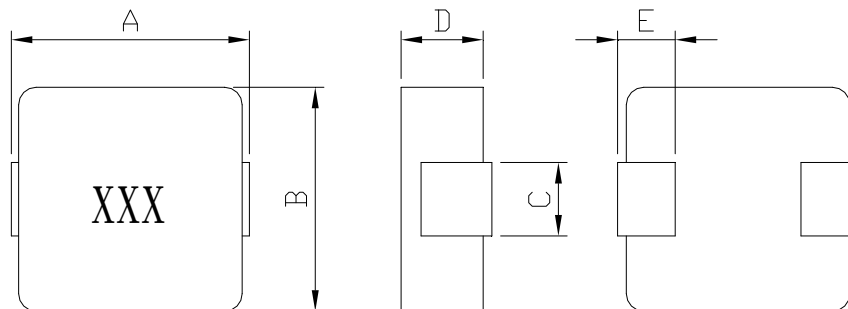
<b>SEP</b>	<b>0502EB</b>	—	<b>1R0M</b>	—	<b>LF</b>	—	<b>A</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE		AUTOMOTIVE

### FEATURES :

- Low profile ( 2.0mm max. height ) and 5.75 mm max. square.
- Magnetically shielded and low DC resistance and Suitable for large current .
- Ultra low buzz noise, due to composite construction .
- Ideal for DC – DC converter inductor application in hand help personal Computer ,etc .
- Frequency range up to 5MHZ .
- Large current handling capability .

### SHAPES AND DIMENSIONS :

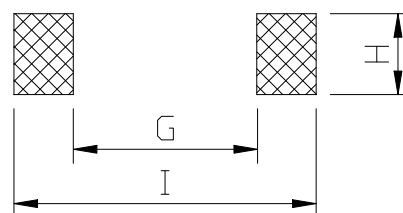
UNIT : mm



A=5.75 Max. B=5.45 Max. C=2.5±0.3 D=2.0 Max. E=1.0±0.3

### RECOMMENDED PATTERNS

UNIT : mm



H=2.8 G= 2.16 I = 6.0



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### SPECIFICATION TABLE

**AEC-Q<sub>200</sub>**

PART NUMBER	INDUCTANCE ( $\mu$ H)	I <sub>sat</sub> ( A ) (Typ.)	I <sub>rms</sub> ( A ) (Typ.)	DCR (m $\Omega$ ) (Typ.)	DCR (m $\Omega$ ) (Max.)
SEP0502EB-R10M-LF-A	0.10 $\pm$ 20%	45.0	17.0	3.60	3.90
SEP0502EB-R22M-LF-A	0.22 $\pm$ 20%	22.0	15.0	4.90	5.20
SEP0502EB-R33M-LF-A	0.33 $\pm$ 20%	25.0	12.0	7.60	8.20
SEP0502EB-R47M-LF-A	0.47 $\pm$ 20%	21.0	11.5	8.90	9.40
SEP0502EB-R68M-LF-A	0.68 $\pm$ 20%	15.0	10.0	11.2	12.4
SEP0502EB-1R0M-LF-A	1.0 $\pm$ 20%	16.0	7.00	18.9	20.0
SEP0502EB-2R2M-LF-A	2.2 $\pm$ 20%	12.5	4.20	45.6	50.1
SEP0502EB-3R3M-LF-A	3.3 $\pm$ 20%	8.50	3.30	79.2	85.5
SEP0502EB-4R7M-LF-A	4.7 $\pm$ 20%	5.00	2.80	108	116.6
SEP0502EB-5R6M-LF-A	5.6 $\pm$ 20%	4.50	2.50	113	122.0
SEP0502EB-6R8M-LF-A	6.8 $\pm$ 20%	4.30	2.40	139	150.0
SEP0502EB-100M-LF-A	10 $\pm$ 20%	4.00	2.30	184	199.0

- I<sub>sat</sub> : DC current at which the inductance drops 30% (typ) from its value without current.
- I<sub>rms</sub> : Average current for a 40°C temperature rise above 25°C ambient.
- Test Frequency at 100KHz / 0.1V
- Operating temperature range -55°C to +125°C , Electrical specifications at 25°C.