



## SEP0302EC SERIES ~ High Current Power Inductors



### PART NUMBERING SYSTEM

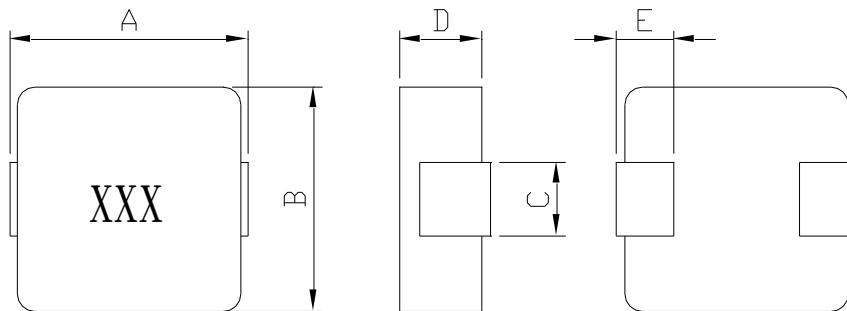
<b>SEP</b>	<b>0302EC</b>	—	<b>1R5M</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

### FEATURES :

- Ultra-low profiles of 2.0 mm and 1212 case size – 3.0 mm by 3.6 mm footprint.
- High frequency operation – up to 1 MHz for DC/DC converters .
- Standard inductance values from 0.10  $\mu$ H through 10  $\mu$ H .
- Saturation current from 1.6 A to 14.0 A
- Large current handling capability .

### SHAPES AND DIMENSIONS :

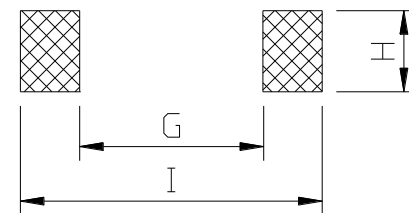
UNIT : mm



A=3.5±0.2 B=3.2±0.2 C=1.2±0.2 D=1.8±0.2 E=0.7±0.2

### RECOMMENDED PATTERNS

UNIT : mm



H=1.4 G= 1.2 I = 4.2

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### SPECIFICATION TABLE

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.)
SEP0302EC-R10M-LF	0.10 $\pm$ 20%	14	10.5	6.6	9.0
SEP0302EC-R22M-LF	0.22 $\pm$ 20%	11.2	9.0	11	14
SEP0302EC-R33M-LF	0.33 $\pm$ 20%	10	8.0	17	21
SEP0302EC-R47M-LF	0.47 $\pm$ 20%	9.0	7.0	19.7	23
SEP0302EC-R60M-LF	0.60 $\pm$ 20%	7.5	6.0	24	28
SEP0302EC-R68M-LF	0.68 $\pm$ 20%	7.0	5.5	25.5	29
SEP0302EC-R82M-LF	0.82 $\pm$ 20%	6.0	4.8	27	32
SEP0302EC-1R0M-LF	1.00 $\pm$ 20%	5.0	4.0	32	38
SEP0302EC-1R2M-LF	1.20 $\pm$ 20%	4.5	3.9	39	47
SEP0302EC-1R5M-LF	1.50 $\pm$ 20%	4.0	3.8	42	50
SEP0302EC-2R2M-LF	2.20 $\pm$ 20%	3.7	3.5	65	75
SEP0302EC-3R3M-LF	3.30 $\pm$ 20%	3.5	3.0	125	145
SEP0302EC-4R7M-LF	4.70 $\pm$ 20%	3.0	2.6	172	200
SEP0302EC-5R6M-LF	5.60 $\pm$ 20%	2.6	2.2	205	238
SEP0302EC-6R8M-LF	6.80 $\pm$ 20%	2.2	1.9	260	300
SEP0302EC-8R2M-LF	8.20 $\pm$ 20%	1.9	1.6	340	390
SEP0302EC-100M-LF	10.0 $\pm$ 20%	1.6	1.4	366	422

- 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 / 1V
- Operating temperature range -55°C to +125°C , Electrical specifications at 25°C.