



## Low Profile SMT Power Inductors - SEP0502EC SERIES



### PART NUMBERING SYSTEM

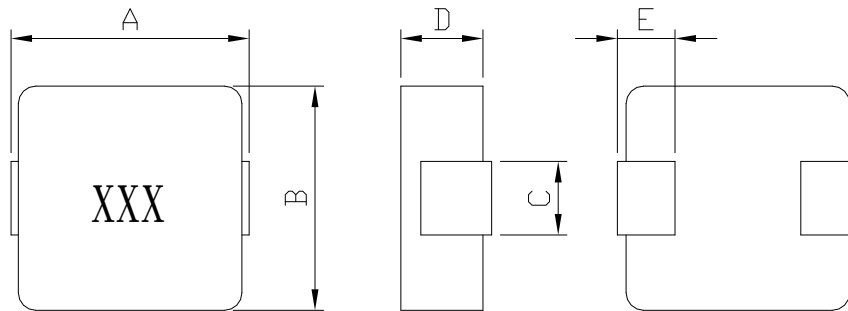
|            |               |   |             |   |           |
|------------|---------------|---|-------------|---|-----------|
| <b>SEP</b> | <b>0502EC</b> | — | <b>R33M</b> | — | <b>LF</b> |
| TYPE       | DIMENSIONS    |   | INDUCTANCE  |   | LEAD FREE |

### FEATURES :

- Low profile ( 2.0mm max. height ) and 5.75 mm max. square.
- Magnetically shielded and low DC resistance and Suitable for large current .DC current up to 25A .
- Handles high transient current spikes without saturation .
- Frequency range up to 1.0 MHz .
- Large current handling capability .

### SHAPES AND DIMENSIONS :

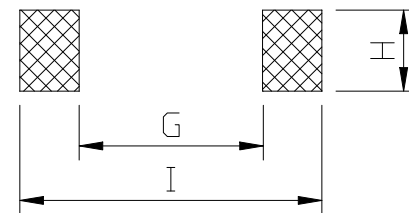
UNIT : mm



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

| PART NUMBER       | INDUCTANCE (μH) | Isat (A) (Typ.) | Irms (A) (Typ.) | DCR (mΩ) (Typ.) | DCR (mΩ) (Max.) |
|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SEP0502EC-R10M-LF | 0.10±20%        | 25.0            | 21.0            | 2.70            | 2.90            |
| SEP0502EC-R22M-LF | 0.22±20%        | 13.0            | 17.0            | 4.10            | 4.50            |
| SEP0502EC-R33M-LF | 0.33±20%        | 7.50            | 13.0            | 5.50            | 5.90            |
| SEP0502EC-R47M-LF | 0.47±20%        | 8.00            | 12.5            | 7.10            | 7.70            |
| SEP0502EC-1R0M-LF | 1.0±20%         | 7.00            | 7.50            | 16.8            | 18.1            |
| SEP0502EC-2R2M-LF | 2.2±20%         | 5.50            | 5.00            | 34.9            | 37.7            |
| SEP0502EC-3R3M-LF | 3.3±20%         | 4.70            | 4.10            | 53.5            | 57.8            |
| SEP0502EC-4R7M-LF | 4.7±20%         | 3.00            | 3.20            | 75.3            | 81.3            |
| SEP0502EC-5R6M-LF | 5.6±20%         | 2.20            | 3.00            | 85.2            | 92.0            |
| SEP0502EC-100M-LF | 10±20%          | 2.00            | 2.20            | 169.3           | 182.8           |

- Isat : DC current at which the inductance drops 20% (typ) from its value without current.
- I rms : 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.