

## SEP0603ELD SERIES - High Current SMD Inductors



RoHS Compliant

### PART NUMBERING SYSTEM

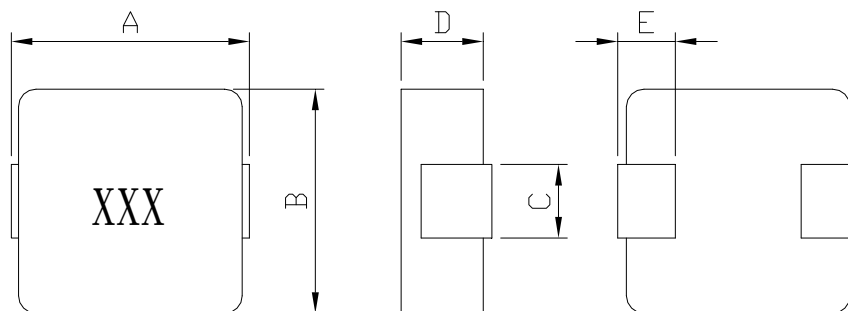
|            |                |   |             |   |           |
|------------|----------------|---|-------------|---|-----------|
| <b>SEP</b> | <b>0603ELD</b> | — | <b>6R8M</b> | — | <b>LF</b> |
| TYPE       | DIMENSIONS     |   | INDUCTANCE  |   | LEAD FREE |

### FEATURES:

- Low profile ( 3.0mm max. height ) and 7.5 mm max. square.
- Magnetically shielded and low DC resistance.
- Suitable for large current and low DC resistance .
- Ultra low buzz noise, due to composite construction .
- Ideal for DC – DC converter inductor application in hand held personal Computer, etc.
- Frequency range up to 1MHZ.
- Large current handling capability.

### SHAPES AND DIMENSIONS:

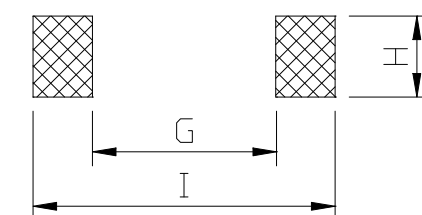
UNIT : mm



**A=7.5 Max B=6.9 Max. C=3.0±0.3 D=3.0 Max. E=1.6±0.5**

### RECOMMENDED PATTERNS:

UNIT : mm



**H=3.5 G= 3.7 I = 8.4**

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**SPECIFICATION TABLE**

| PART NUMBER        | INDUCTANCE<br>( $\mu$ H) | Isat ( A )<br>(Min.) | Irms ( A )<br>(Min.) | DCR (m $\Omega$ )<br>(Max.) | DCR (m $\Omega$ )<br>(Typ.) | TEST FREQ.<br>( f ) |
|--------------------|--------------------------|----------------------|----------------------|-----------------------------|-----------------------------|---------------------|
| SEP0603ELD-R10M-LF | 0.10 $\pm$ 20%           | 60.0                 | 32.5                 | 1.70                        | 1.50                        | 100KHz/1V           |
| SEP0603ELD-R15M-LF | 0.15 $\pm$ 20%           | 35.0                 | 32.5                 | 1.70                        | 1.50                        | 100KHz/1V           |
| SEP0603ELD-R20M-LF | 0.20 $\pm$ 20%           | 30.0                 | 32.5                 | 1.70                        | 1.50                        | 100KHz/1V           |
| SEP0603ELD-R22M-LF | 0.22 $\pm$ 20%           | 29.0                 | 28.0                 | 2.60                        | 2.10                        | 100KHz/1V           |
| SEP0603ELD-R33M-LF | 0.33 $\pm$ 20%           | 23.0                 | 23.0                 | 3.00                        | 2.50                        | 100KHz/1V           |
| SEP0603ELD-R36M-LF | 0.36 $\pm$ 20%           | 22.0                 | 22.0                 | 3.00                        | 2.60                        | 100KHz/1V           |
| SEP0603ELD-R47M-LF | 0.47 $\pm$ 20%           | 18.0                 | 20.0                 | 4.00                        | 3.20                        | 100KHz/1V           |
| SEP0603ELD-R56M-LF | 0.56 $\pm$ 20%           | 17.0                 | 18.0                 | 4.20                        | 3.60                        | 100KHz/1V           |
| SEP0603ELD-R68M-LF | 0.68 $\pm$ 20%           | 15.0                 | 17.0                 | 4.40                        | 3.70                        | 100KHz/1V           |
| SEP0603ELD-R82M-LF | 0.82 $\pm$ 20%           | 14.0                 | 17.0                 | 4.50                        | 3.80                        | 100KHz/1V           |
| SEP0603ELD-1R0M-LF | 1.0 $\pm$ 20%            | 13.0                 | 14.0                 | 6.00                        | 5.40                        | 100KHz/1V           |
| SEP0603ELD-1R5M-LF | 1.5 $\pm$ 20%            | 11.0                 | 13.0                 | 8.00                        | 7.20                        | 100KHz/1V           |
| SEP0603ELD-2R2M-LF | 2.2 $\pm$ 20%            | 10.0                 | 11.0                 | 12.0                        | 10.0                        | 100KHz/1V           |
| SEP0603ELD-3R3M-LF | 3.3 $\pm$ 20%            | 8.00                 | 9.00                 | 15.4                        | 14.5                        | 100KHz/1V           |
| SEP0603ELD-4R7M-LF | 4.7 $\pm$ 20%            | 6.00                 | 7.00                 | 26.0                        | 24.5                        | 100KHz/1V           |
| SEP0603ELD-5R6M-LF | 5.6 $\pm$ 20%            | 5.50                 | 6.00                 | 28.0                        | 26.5                        | 100KHz/1V           |
| SEP0603ELD-6R8M-LF | 6.8 $\pm$ 20%            | 5.00                 | 5.50                 | 42.0                        | 39.0                        | 100KHz/1V           |
| SEP0603ELD-8R2M-LF | 8.2 $\pm$ 20%            | 5.00                 | 5.00                 | 52.0                        | 48.0                        | 100KHz/1V           |
| SEP0603ELD-100M-LF | 10 $\pm$ 20%             | 5.00                 | 5.00                 | 62.0                        | 56.0                        | 100KHz/1V           |
| SEP0603ELD-120M-LF | 12 $\pm$ 20%             | 3.50                 | 3.50                 | 88.0                        | 80.0                        | 100KHz/1V           |
| SEP0603ELD-150M-LF | 15 $\pm$ 20%             | 3.00                 | 3.00                 | 106.0                       | 96.0                        | 100KHz/1V           |
| SEP0603ELD-220M-LF | 22 $\pm$ 20%             | 2.50                 | 2.50                 | 135.0                       | 128.9                       | 100KHz/1V           |

- All test Data is referenced to 25°C ambient.
- Typical Heat Rating DC Current would cause an approximately  $\Delta$ T of 40°C.
- Typical Saturation DC Current would cause Lo to drop approximately 30%
- Operating Temperature Range: -55°C ~ +125°C.
- Reel Qty 1,000pcs