



# SDT1608X SERIES ~ Shielded SMD Power Inductors



RoHS Compliant

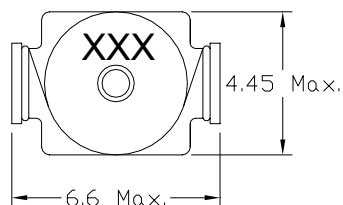
## PART NUMBERING SYSTEM

|            |                  |   |                |   |           |
|------------|------------------|---|----------------|---|-----------|
| <b>SDT</b> | <b>1 6 0 8 X</b> | — | <b>1 0 1 M</b> | — | <b>LF</b> |
| TYPE       | DIMENSIONS       |   | INDUCTANCE     |   | LEAD FREE |

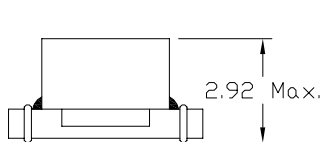
## SHAPES AND DIMENSIONS

UNIT : mm

TOP VIEW



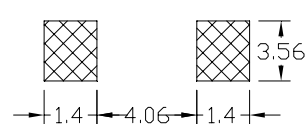
FRONT VIEW



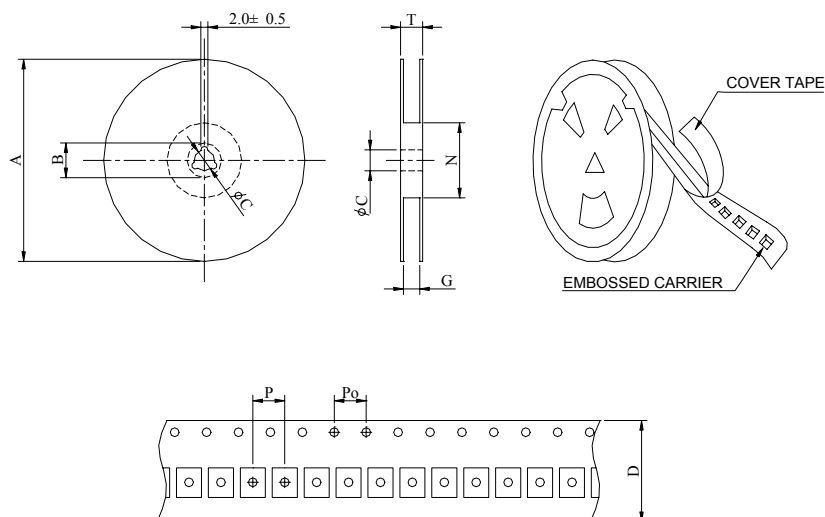
BOTTOM VIEW



PCB PATTERN



## PACKAGING SPECIFICATION



| SERIES   | STAYLE | Q' TY<br>(PCS) | DIMENSIONS (m/m) |       |       |    |                 |                |   |    |      |
|----------|--------|----------------|------------------|-------|-------|----|-----------------|----------------|---|----|------|
|          |        |                | A                | B±0.8 | C±0.5 | D  | G <sup>+0</sup> | N <sup>0</sup> | P | Po | T    |
| SDT1608X | 13-16  | 2000           | 330              | 21    | 13    | 16 | 18              | 50             | 8 | 4  | 22.4 |



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### SPECIFICATION TABLE

| PART NUMBER      | INDUCTANCE<br>( $\mu$ H) | INDUCTANCE<br>Rating ( $\mu$ H) | DCR ( $\Omega$ )<br>(Max.) | IDC<br>( A ) | Switching<br>Freq.<br>Max. ( f ) |
|------------------|--------------------------|---------------------------------|----------------------------|--------------|----------------------------------|
| SDT1608X-1R0M-LF | 1.0 $\pm$ 20%            | 0.6                             | 0.045                      | 2.0          | 1MHHz                            |
| SDT1608X-1R5M-LF | 1.5 $\pm$ 20%            | 0.8                             | 0.050                      | 1.9          | 1MHHz                            |
| SDT1608X-2R2M-LF | 2.2 $\pm$ 20%            | 0.9                             | 0.065                      | 1.5          | 1MHHz                            |
| SDT1608X-3R3M-LF | 3.3 $\pm$ 20%            | 1.5                             | 0.070                      | 1.2          | 1MHHz                            |
| SDT1608X-4R7M-LF | 4.7 $\pm$ 20%            | 2.0                             | 0.080                      | 1.2          | 1MHHz                            |
| SDT1608X-6R8M-LF | 6.8 $\pm$ 20%            | 3.0                             | 0.085                      | 1.0          | 1MHHz                            |
| SDT1608X-100M-LF | 10 $\pm$ 20%             | 5.0                             | 0.095                      | 0.7          | 1MHHz                            |
| SDT1608X-150M-LF | 15 $\pm$ 20%             | 6.0                             | 0.135                      | 0.6          | 1MHHz                            |
| SDT1608X-220M-LF | 22 $\pm$ 20%             | 10                              | 0.160                      | 0.5          | 1MHHz                            |
| SDT1608X-330M-LF | 33 $\pm$ 20%             | 12                              | 0.275                      | 0.45         | 1MHHz                            |
| SDT1608X-470M-LF | 47 $\pm$ 20%             | 20                              | 0.300                      | 0.34         | 1MHHz                            |
| SDT1608X-680M-LF | 68 $\pm$ 20%             | 30                              | 0.575                      | 0.29         | 1MHHz                            |
| SDT1608X-101M-LF | 100 $\pm$ 20%            | 40                              | 1.100                      | 0.24         | 1MHHz                            |
| SDT1608X-151M-LF | 150 $\pm$ 20%            | 60                              | 1.400                      | 0.20         | 500KHz                           |
| SDT1608X-221M-LF | 220 $\pm$ 20%            | 90                              | 2.250                      | 0.17         | 500KHz                           |
| SDT1608X-331M-LF | 330 $\pm$ 20%            | 100                             | 2.900                      | 0.16         | 500KHz                           |
| SDT1608X-471M-LF | 470 $\pm$ 20%            | 150                             | 3.600                      | 0.14         | 500KHz                           |
| SDT1608X-681M-LF | 680 $\pm$ 20%            | 200                             | 4.550                      | 0.12         | 500KHz                           |
| SDT1608X-102M-LF | 1000 $\pm$ 20%           | 400                             | 8.100                      | 0.08         | 500KHz                           |

- Inductance tested at 100 kHz, 0.1 Vrms.
- Average maximum allowable current. SDT1608 are designed for current spikes as high as twice the current rating.
- Operating temperature range -40°C to +85°C, Electrical specifications at 25°C.