

## SDS3D18 SERIES

### Low Profile Shielded Power Inductors



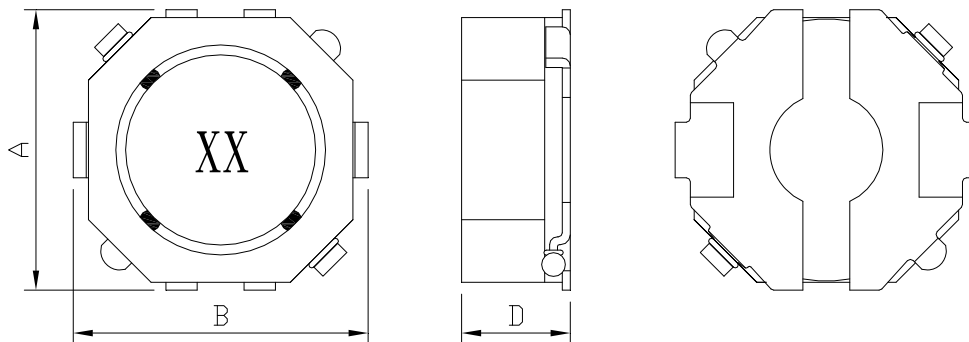
RoHS Compliant

#### PART NUMBERING SYSTEM

| <u>SDS</u> | <u>3D18</u> | — | <u>6R8N</u> | — | <u>LF</u> |
|------------|-------------|---|-------------|---|-----------|
| TYPE       | DIMENSIONS  |   | INDUCTANCE  |   | LEAD FREE |

#### SHAPES AND DIMENSIONS

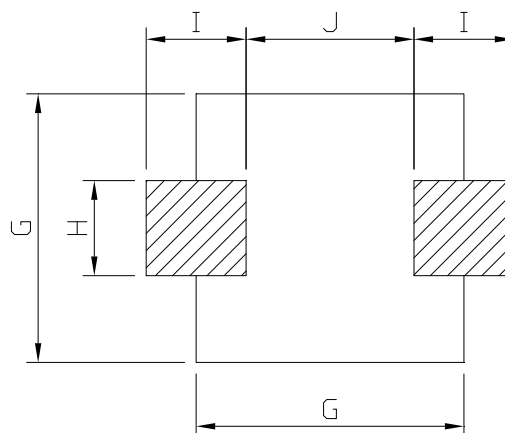
UNIT : mm



**A=4.0 Max. B=4.0 Max. D=1.8 Max.**

#### RECOMMENDED PATTERNS

UNIT : mm



**G=4.0 H=1.5 I=1.4 J=2.0**

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#### ELECTRICAL CHARACTERISTICS :

| PART NUMBER     | INDUCTANCE<br>( $\mu$ H) | DCR (m $\Omega$ )<br>Max.(Typ.) | Isat (A)<br>( Max. ) | Irms (A)<br>( Max. ) | Stamp |
|-----------------|--------------------------|---------------------------------|----------------------|----------------------|-------|
| SDS3D18-1R2N-LF | 1.2 $\pm$ 30%            | 88(70)                          | 2.00                 | 1.90                 | 1R2   |
| SDS3D18-1R8N-LF | 1.8 $\pm$ 30%            | 100(80)                         | 1.80                 | 1.80                 | 1R8   |
| SDS3D18-2R2N-LF | 2.2 $\pm$ 30%            | 113(90)                         | 1.60                 | 1.70                 | 2R2   |
| SDS3D18-2R7N-LF | 2.7 $\pm$ 30%            | 125(100)                        | 1.40                 | 1.55                 | 2R7   |
| SDS3D18-3R3N-LF | 3.3 $\pm$ 30%            | 138(110)                        | 1.20                 | 1.45                 | 3R3   |
| SDS3D18-3R9N-LF | 3.9 $\pm$ 30%            | 150(120)                        | 1.10                 | 1.35                 | 3R9   |
| SDS3D18-4R7N-LF | 4.7 $\pm$ 30%            | 162(130)                        | 1.00                 | 1.25                 | 4R7   |
| SDS3D18-5R6N-LF | 5.6 $\pm$ 30%            | 181(145)                        | 0.95                 | 1.15                 | 5R6   |
| SDS3D18-6R8N-LF | 6.8 $\pm$ 30%            | 200(160)                        | 0.90                 | 1.05                 | 6R8   |
| SDS3D18-8R2N-LF | 8.2 $\pm$ 30%            | 225(180)                        | 0.80                 | 0.95                 | 8R2   |
| SDS3D18-100M-LF | 10 $\pm$ 20%             | 250(200)                        | 0.75                 | 0.85                 | 100   |
| SDS3D18-120M-LF | 12 $\pm$ 20%             | 337(270)                        | 0.65                 | 0.70                 | 120   |
| SDS3D18-150M-LF | 15 $\pm$ 20%             | 393(315)                        | 0.60                 | 0.65                 | 150   |
| SDS3D18-180M-LF | 18 $\pm$ 20%             | 437(350)                        | 0.55                 | 0.60                 | 180   |
| SDS3D18-220M-LF | 22 $\pm$ 20%             | 563(450)                        | 0.50                 | 0.55                 | 220   |
| SDS3D18-270M-LF | 27 $\pm$ 20%             | 637(510)                        | 0.45                 | 0.45                 | 270   |
| SDS3D18-330M-LF | 33 $\pm$ 20%             | 712(570)                        | 0.40                 | 0.40                 | 330   |
| SDS3D18-390M-LF | 39 $\pm$ 20%             | 956(765)                        | 0.38                 | 0.35                 | 390   |
| SDS3D18-470M-LF | 47 $\pm$ 20%             | 1100(880)                       | 0.32                 | 0.30                 | 470   |

- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
- Isat : DC current at which the inductance drops 30% (typ) from its value without current.
- Irms: The actual current when temperature of coil becomes  $\Delta 40^{\circ}\text{C}$  . ( Ta=+25 $^{\circ}\text{C}$  )
- Operating temperature range -40 $^{\circ}\text{C}$  to +125 $^{\circ}\text{C}$  , Electrical specifications at 25 $^{\circ}\text{C}$ .  
 Packing : 13" reel, machine-ready ,embossed plastic tape ( 3,000 parts per full reel).