## New Product

**SURFACE MOUNT**
**SHIELDED POWER INDUCTOR**
**SERIES SDD3118**

### FEATURES

- RoHS compliant
- High current handling capacity in a shielded package
- Easy to use in any design
- Ideal for use in laptops, communication systems and MP3 players

### ELECTRICAL SPECIFICATIONS

| | | |
|---|---|---|
| - Inductance range | | 1uH to 100uH |
| - Test condition (1uH - 8.2uH) | | 100kHz @ 0.25Vrms |
| - Test condition (10uH - 100uH) | | 1kHz @ 0.25Vrms |
| - Test equipment | | Quadtech 1750 LCR Meter |

### PHYSICAL SPECIFICATIONS

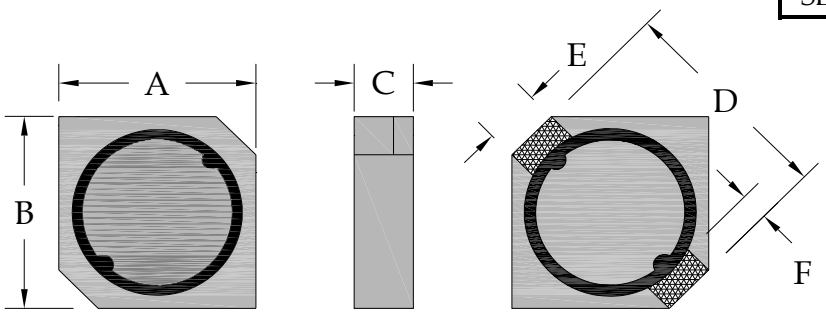
| | | |
|---|---|---|
| - Operating temp. | | -25°C to +105°C |
| - Core | | Ferrite |
| - Packaging | T & R | 3500 pieces per reel |
| - Tape & reel spec. | Tape | 12 mm embossed carrier |
| | Reel | 330 mm |

### SPECIFICATIONS

| Part Number | L(uH) | Tol % ± | DCR (ohms) max | Rated Current (A) (Note 1) |
|---|---|---|---|---|
| SDD3118-1R0M | 1.0 | 20 | 0.055 | 1.69 |
| SDD3118-2R2M | 2.2 | 20 | 0.13 | 1.22 |
| SDD3118-2R7M | 2.7 | 20 | 0.16 | 1.08 |
| SDD3118-3R3M | 3.3 | 20 | 0.19 | 0.99 |
| SDD3118-3R9M | 3.9 | 20 | 0.25 | 0.85 |
| SDD3118-4R7M | 4.7 | 20 | 0.28 | 0.80 |
| SDD3118-5R6M | 5.6 | 20 | 0.29 | 0.78 |
| SDD3118-6R8M | 6.8 | 20 | 0.36 | 0.70 |
| SDD3118-8R2M | 8.2 | 20 | 0.43 | 0.65 |
| SDD3118-100M | 10 | 20 | 0.55 | 0.51 |
| SDD3118-120M | 12 | 20 | 0.66 | 0.48 |
| SDD3118-150M | 15 | 20 | 0.82 | 0.47 |
| SDD3118-180M | 18 | 20 | 1.07 | 0.41 |
| SDD3118-220M | 22 | 20 | 1.21 | 0.36 |
| SDD3118-270M | 27 | 20 | 1.51 | 0.31 |
| SDD3118-330M | 33 | 20 | 2.01 | 0.28 |
| SDD3118-390M | 39 | 20 | 2.27 | 0.26 |
| SDD3118-470M | 47 | 20 | 2.54 | 0.24 |
| SDD3118-560M | 56 | 20 | 3.34 | 0.22 |
| SDD3118-680M | 68 | 20 | 3.67 | 0.20 |
| SDD3118-820M | 82 | 20 | 4.18 | 0.19 |
| SDD3118-101M | 100 | 20 | 5.14 | 0.16 |

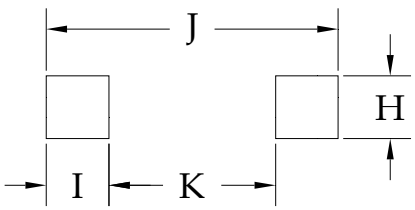
## Dimensions in millimeters

| | |
|---|---|
| Length A | 3.1± 0.3 |
| Width B | 3.1± 0.3 |
| Height C | 1.8± 0.2 |
| D | 3.6 ref |
| Term width E | 1.3 ref |
| Term length F | 0.6 ref |




## Suggested PCB land pattern

H = 0.9
I = 0.9
J = 4.0
K = 2.2




Notes:
1. Based on ΔL of 30% max or ΔT of 40°C max, whichever occurs first
2. All test data based on 25°C ambient. Part temperature (max ambient + temp rise) must not exceed 105°C under worst case operating conditions. Circuit design, other components, PCB trace size and thickness, airflow and other cooling provisions all effect the part temperature.