

## New Product

### SURFACE MOUNT SHIELDED POWER INDUCTOR SERIES SDA4430

#### FEATURES

- RoHS compliant
- High current handling capacity
- Ultra thin
- Low profile
- A perfect fit for various applications including DC-DC converters, laptops and mobile devices.

#### ELECTRICAL SPECIFICATIONS

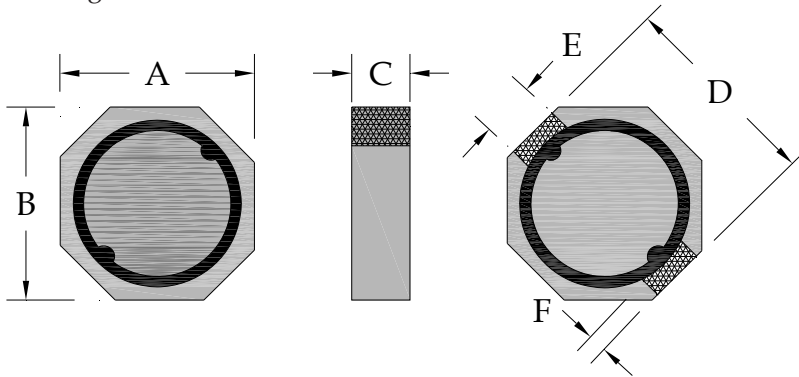
- Inductance range 1uH to 6.8mH
- Test condition (1uH - 8.2uH) 100kHz @ 0.25Vrms
- Test condition (10uH - 6.8mH) 1kHz @ 0.25Vrms
- Test equipment Quadtech 1750 LCR Meter

#### PHYSICAL SPECIFICATIONS

- Operating temp. -25°C to +105°C
- Core Ferrite
- Packaging T & R 2500 pieces per reel
- Tape & reel spec. Tape 12 mm embossed carrier
- Reel 330 mm

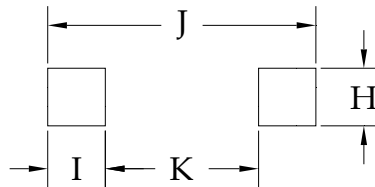
#### Dimensions in millimeters

|               |                 |
|---------------|-----------------|
| Length A      | $3.85 \pm 0.30$ |
| Width B       | $3.85 \pm 0.30$ |
| Height C      | 3.0 max         |
| D             | $4.4 \pm 0.4$   |
| Term width E  | 1.6 ref         |
| Term length F | 0.5 ref         |



#### Suggested PCB land pattern

H = 1.9  
I = 0.8  
J = 4.6  
K = 3.0



#### Notes:

1. Based on  $\Delta L$  of 30% max or  $\Delta T$  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.

#### SPECIFICATIONS

| Part Number  | L(uH) | Tol<br>% $\pm$ | DCR<br>(ohms)<br>max | Rated<br>Current (A)<br>(Note 1) |
|--------------|-------|----------------|----------------------|----------------------------------|
| SDA4430-1R0M | 1.0   | 20             | 0.009                | 1.90                             |
| SDA4430-1R2M | 1.2   | 20             | 0.010                | 1.75                             |
| SDA4430-1R5M | 1.5   | 20             | 0.013                | 1.45                             |
| SDA4430-2R0M | 2.0   | 20             | 0.016                | 1.25                             |
| SDA4430-2R2M | 2.2   | 20             | 0.017                | 1.15                             |
| SDA4430-2R5M | 2.5   | 20             | 0.018                | 1.05                             |
| SDA4430-2R7M | 2.7   | 20             | 0.020                | 1.00                             |
| SDA4430-3R3M | 3.3   | 20             | 0.024                | 0.96                             |
| SDA4430-3R5M | 3.5   | 20             | 0.025                | 0.95                             |
| SDA4430-3R9M | 3.9   | 20             | 0.033                | 0.87                             |
| SDA4430-4R7M | 4.7   | 20             | 0.039                | 0.78                             |
| SDA4430-5R6M | 5.6   | 20             | 0.044                | 0.74                             |
| SDA4430-6R8M | 6.8   | 20             | 0.051                | 0.68                             |
| SDA4430-8R2M | 8.2   | 20             | 0.065                | 0.57                             |
| SDA4430-100M | 10    | 20             | 0.092                | 0.43                             |
| SDA4430-120M | 12    | 20             | 0.100                | 0.38                             |
| SDA4430-150M | 15    | 20             | 0.113                | 0.33                             |
| SDA4430-180M | 18    | 20             | 0.125                | 0.30                             |
| SDA4430-220M | 22    | 20             | 0.146                | 0.28                             |
| SDA4430-270M | 27    | 20             | 0.176                | 0.26                             |
| SDA4430-330M | 33    | 20             | 0.214                | 0.23                             |
| SDA4430-390M | 39    | 20             | 0.225                | 0.21                             |
| SDA4430-470M | 47    | 20             | 0.304                | 0.19                             |
| SDA4430-560M | 56    | 20             | 0.324                | 0.17                             |
| SDA4430-680M | 68    | 20             | 0.472                | 0.156                            |
| SDA4430-820M | 82    | 20             | 0.539                | 0.142                            |
| SDA4430-101M | 100   | 20             | 0.608                | 0.128                            |
| SDA4430-121M | 120   | 20             | 0.757                | 0.116                            |
| SDA4430-151M | 150   | 20             | 0.882                | 0.106                            |
| SDA4430-181M | 180   | 20             | 1.13                 | 0.095                            |
| SDA4430-221M | 220   | 20             | 1.27                 | 0.087                            |
| SDA4430-271M | 270   | 20             | 1.57                 | 0.080                            |
| SDA4430-331M | 330   | 20             | 1.93                 | 0.078                            |
| SDA4430-391M | 390   | 20             | 2.36                 | 0.073                            |
| SDA4430-471M | 470   | 20             | 2.77                 | 0.068                            |
| SDA4430-561M | 560   | 20             | 3.52                 | 0.065                            |
| SDA4430-681M | 680   | 20             | 4.25                 | 0.056                            |
| SDA4430-821M | 820   | 20             | 4.83                 | 0.050                            |
| SDA4430-102M | 1000  | 20             | 6.26                 | 0.047                            |
| SDA4430-122M | 1200  | 20             | 7.86                 | 0.043                            |
| SDA4430-152M | 1500  | 20             | 9.98                 | 0.039                            |
| SDA4430-182M | 1800  | 20             | 12.17                | 0.036                            |
| SDA4430-272M | 2700  | 20             | 16.12                | 0.029                            |
| SDA4430-332M | 3300  | 20             | 22.04                | 0.026                            |
| SDA4430-392M | 3900  | 20             | 27.50                | 0.022                            |
| SDA4430-472M | 4700  | 20             | 30.80                | 0.020                            |
| SDA4430-562M | 5600  | 20             | 35.94                | 0.019                            |
| SDA4430-682M | 6800  | 20             | 44.01                | 0.017                            |