



## Features

- Available in E12 series
- Small design of only 7.8 mm max. diameter
- RoHS compliant\*

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - CD players
  - Car radios

## SDR0805 Series - SMD Power Inductors

### Electrical Specifications

| Bourns<br>Part Number | Inductance<br>1 kHz |        | Q<br>Ref. | Test<br>Frequency<br>(MHz) | SRF<br>Min.<br>(MHz) | RDC<br>Max.<br>(Ω) | I rms<br>Max.<br>(A) | I sat<br>Typ.<br>(A) |
|-----------------------|---------------------|--------|-----------|----------------------------|----------------------|--------------------|----------------------|----------------------|
|                       | (μH)                | Tol. % |           |                            |                      |                    |                      |                      |
| SDR0805-1R5ML         | 1.5                 | ± 20   | 32        | 7.96                       | 120                  | 0.02               | 6.00                 | 9.10                 |
| SDR0805-2R5ML         | 2.5                 | ± 20   | 32        | 7.96                       | 70                   | 0.02               | 5.00                 | 7.20                 |
| SDR0805-3R3ML         | 3.3                 | ± 20   | 32        | 7.96                       | 55                   | 0.02               | 4.50                 | 6.30                 |
| SDR0805-3R9ML         | 3.9                 | ± 20   | 32        | 7.96                       | 45                   | 0.02               | 4.40                 | 5.70                 |
| SDR0805-4R7ML         | 4.7                 | ± 20   | 31        | 7.96                       | 38                   | 0.03               | 3.70                 | 5.00                 |
| SDR0805-5R6ML         | 5.6                 | ± 20   | 31        | 7.96                       | 34                   | 0.04               | 3.50                 | 4.60                 |
| SDR0805-6R8ML         | 6.8                 | ± 20   | 30        | 7.96                       | 33                   | 0.04               | 3.20                 | 4.10                 |
| SDR0805-7R5ML         | 7.5                 | ± 20   | 29        | 7.96                       | 30                   | 0.05               | 2.80                 | 3.70                 |
| SDR0805-8R2ML         | 8.2                 | ± 20   | 29        | 7.96                       | 30                   | 0.05               | 2.80                 | 3.70                 |
| SDR0805-100ML         | 10                  | ± 20   | 25        | 2.52                       | 22                   | 0.07               | 2.30                 | 3.20                 |
| SDR0805-120ML         | 12                  | ± 20   | 25        | 2.52                       | 20                   | 0.08               | 2.00                 | 3.00                 |
| SDR0805-150ML         | 15                  | ± 20   | 25        | 2.52                       | 16                   | 0.09               | 1.80                 | 2.70                 |
| SDR0805-180ML         | 18                  | ± 20   | 20        | 2.52                       | 15                   | 0.10               | 1.60                 | 2.60                 |
| SDR0805-220ML         | 22                  | ± 20   | 20        | 2.52                       | 13                   | 0.11               | 1.50                 | 2.30                 |
| SDR0805-270KL         | 27                  | ± 20   | 20        | 2.52                       | 12                   | 0.12               | 1.30                 | 2.10                 |
| SDR0805-330KL         | 33                  | ± 10   | 15        | 2.52                       | 10                   | 0.14               | 1.20                 | 1.90                 |
| SDR0805-390KL         | 39                  | ± 10   | 15        | 2.52                       | 10                   | 0.16               | 1.10                 | 1.70                 |
| SDR0805-470KL         | 47                  | ± 10   | 15        | 2.52                       | 9                    | 0.20               | 1.00                 | 1.60                 |
| SDR0805-560KL         | 56                  | ± 10   | 15        | 2.52                       | 9                    | 0.24               | 0.94                 | 1.50                 |
| SDR0805-680KL         | 68                  | ± 10   | 15        | 2.52                       | 8                    | 0.30               | 0.85                 | 1.30                 |
| SDR0805-820KL         | 82                  | ± 10   | 12        | 2.52                       | 7                    | 0.37               | 0.78                 | 1.20                 |
| SDR0805-101KL         | 100                 | ± 10   | 12        | 0.796                      | 7                    | 0.45               | 0.72                 | 1.10                 |
| SDR0805-121KL         | 120                 | ± 10   | 12        | 0.796                      | 6                    | 0.48               | 0.66                 | 1.00                 |
| SDR0805-151KL         | 150                 | ± 10   | 12        | 0.796                      | 6                    | 0.68               | 0.58                 | 0.85                 |
| SDR0805-181KL         | 180                 | ± 10   | 12        | 0.796                      | 5                    | 0.77               | 0.51                 | 0.80                 |
| SDR0805-221KL         | 220                 | ± 10   | 12        | 0.796                      | 5                    | 0.96               | 0.49                 | 0.80                 |
| SDR0805-271KL         | 270                 | ± 10   | 12        | 0.796                      | 5                    | 1.11               | 0.42                 | 0.66                 |
| SDR0805-331KL         | 330                 | ± 10   | 12        | 0.796                      | 4                    | 1.26               | 0.40                 | 0.58                 |
| SDR0805-391KL         | 390                 | ± 10   | 12        | 0.796                      | 4                    | 1.77               | 0.36                 | 0.55                 |
| SDR0805-471KL         | 470                 | ± 10   | 12        | 0.796                      | 4                    | 1.96               | 0.34                 | 0.50                 |
| SDR0805-561KL         | 560                 | ± 10   | 30        | 0.796                      | 4                    | 2.50               | 0.30                 | 0.46                 |
| SDR0805-681KL         | 680                 | ± 10   | 29        | 0.796                      | 3                    | 2.80               | 0.28                 | 0.42                 |
| SDR0805-821KL         | 820                 | ± 10   | 28        | 0.796                      | 3                    | 4.00               | 0.23                 | 0.35                 |
| SDR0805-102KL         | 1000                | ± 10   | 27        | 0.252                      | 3                    | 4.50               | 0.21                 | 0.34                 |
| SDR0805-122KL         | 1200                | ± 10   | 28        | 0.252                      | 2                    | 6.80               | 0.17                 | 0.28                 |
| SDR0805-152KL         | 1500                | ± 10   | 27        | 0.252                      | 2                    | 8.00               | 0.15                 | 0.26                 |
| SDR0805-182KL         | 1800                | ± 10   | 30        | 0.252                      | 2                    | 9.20               | 0.14                 | 0.23                 |
| SDR0805-222KL         | 2200                | ± 10   | 29        | 0.252                      | 2                    | 10.00              | 0.13                 | 0.20                 |
| SDR0805-272KL         | 2700                | ± 10   | 31        | 0.252                      | 1                    | 11.80              | 0.12                 | 0.18                 |
| SDR0805-332KL         | 3300                | ± 10   | 28        | 0.252                      | 1                    | 16.50              | 0.10                 | 0.17                 |
| SDR0805-392KL         | 3900                | ± 10   | 28        | 0.252                      | 1                    | 18.00              | 0.09                 | 0.16                 |
| SDR0805-472KL         | 4700                | ± 10   | 30        | 0.252                      | 1                    | 21.00              | 0.08                 | 0.15                 |

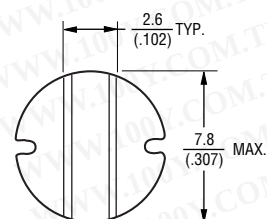
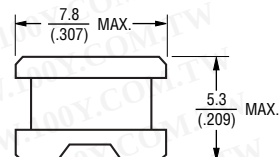
### General Specifications

Test Frequency ..... 1 KHz  
 Test Voltage ..... 1 V  
 Reflow Soldering .... 230 °C, 50 sec. max.  
 Operating Temperature ... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature... -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... +260 °C for 5 sec..

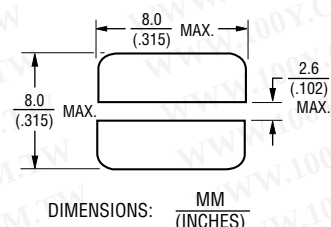
### Materials

Core..... Ferrite DR  
 Wire ..... Enameled copper  
 Base ..... DAP  
 Terminal ..... Ag/Ni/Sn  
 Rated Current..Ind. drop 10 % typ. at Isat  
 Temp. Rise..... 40 °C max. at rated I rms  
 Packaging..... 1000 pcs. per reel

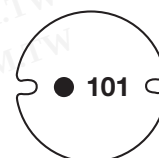
### Product Dimensions



### Recommended Layout



### Typical Part Marking



\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

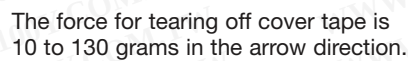
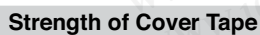
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.

**BOURNS®**

## Materials

勝特力材料 886-3-5753170  
勝特力電子(上海) 86-21-34970699  
勝特力電子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)



The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.