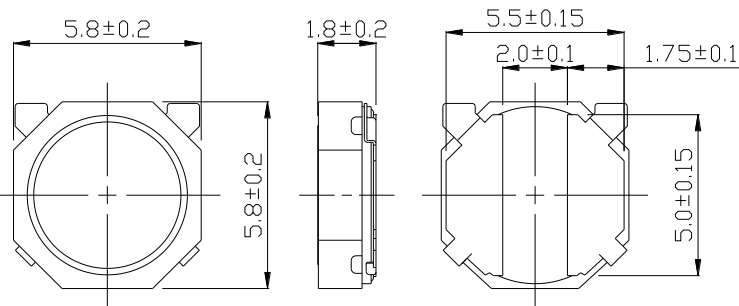


# SMD Power Inductor

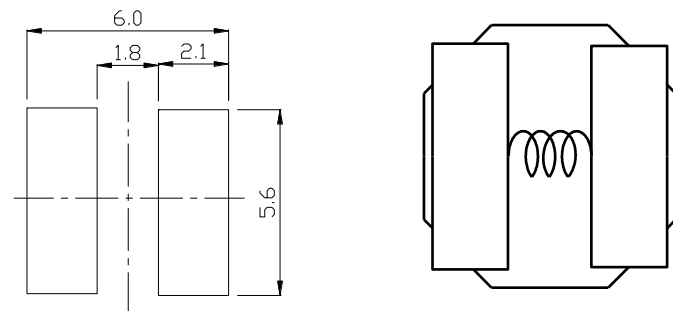
## CDRH58D18R



### Dimension - [mm]



### Land pattern and Schematics - [mm]



### Description

- Ferrite drum core construction.
- Magnetically shielded.
- $L \times W \times H$ :  $6.0 \times 6.0 \times 2.0$ mm Max.
- Product weight: 0.24g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

### Environmental Data

- Operating temperature range:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  (including coil's self temperature rise)
- Storage temperature range:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Solder reflow temperature:  $260^{\circ}\text{C}$  peak.

### Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 3000pcs per reel

### Applications

- Ideally used in DVD, camcorder, Single -lens reflex camera etc.

# SMD Power Inductor

## CDRH58D18R



### Electrical Characteristics

| Part No.           | Stamp | Inductance (μH)<br>[Within] ※1 | D.C.R. (mΩ)<br>[Within]<br>(at 20°C) | Saturation current<br>(A) ※2 |           | Temperature rise<br>current (A) ※3 |
|--------------------|-------|--------------------------------|--------------------------------------|------------------------------|-----------|------------------------------------|
|                    |       |                                |                                      | (at20°C)                     | (at105°C) |                                    |
| CDRH58D18RNP-R90NC | A     | 0.9±30%                        | 15±25%                               | 3.74                         | 2.80      | 5.35                               |
| CDRH58D18RNP-1R5NC | B     | 1.5±30%                        | 18±25%                               | 2.95                         | 2.20      | 4.60                               |
| CDRH58D18RNP-2R0NC | C     | 2.0±30%                        | 23±25%                               | 2.66                         | 1.93      | 4.42                               |
| CDRH58D18RNP-3R6NC | D     | 3.6±30%                        | 29±25%                               | 2.03                         | 1.47      | 3.65                               |
| CDRH58D18RNP-4R7MC | E     | 4.7±20%                        | 31±25%                               | 1.74                         | 1.30      | 3.45                               |
| CDRH58D18RNP-6R8MC | F     | 6.8±20%                        | 50±25%                               | 1.44                         | 1.07      | 2.73                               |
| CDRH58D18RNP-100MC | G     | 10±20%                         | 74±25%                               | 1.17                         | 0.87      | 2.12                               |
| CDRH58D18RNP-150MC | H     | 15±20%                         | 110±20%                              | 0.95                         | 0.70      | 1.75                               |
| CDRH58D18RNP-220MC | J     | 22±20%                         | 162±20%                              | 0.79                         | 0.60      | 1.42                               |
| CDRH58D18RNP-330MC | K     | 33±20%                         | 224±20%                              | 0.63                         | 0.47      | 1.17                               |
| CDRH58D18RNP-470MC | L     | 47±20%                         | 323±20%                              | 0.55                         | 0.40      | 0.95                               |
| CDRH58D18RNP-680MC | M     | 68±20%                         | 495±20%                              | 0.45                         | 0.33      | 0.76                               |
| CDRH58D18RNP-101MC | N     | 100±20%                        | 729±20%                              | 0.37                         | 0.27      | 0.66                               |
| CDRH58D18RNP-151MC | P     | 150±20%                        | 1065±20%                             | 0.30                         | 0.23      | 0.51                               |
| CDRH58D18RNP-221MC | Q     | 220±20%                        | 1675±20%                             | 0.25                         | 0.20      | 0.40                               |
| CDRH58D18RNP-331MC | R     | 330±20%                        | 2660±20%                             | 0.21                         | 0.16      | 0.32                               |

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of it's nominal value.

※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

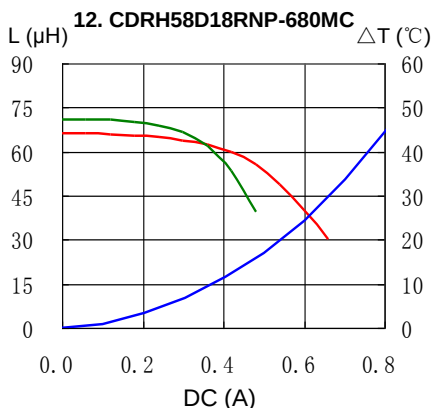
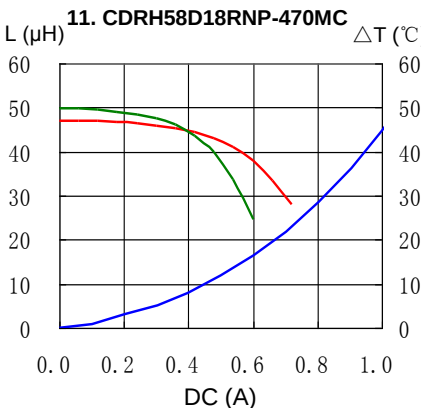
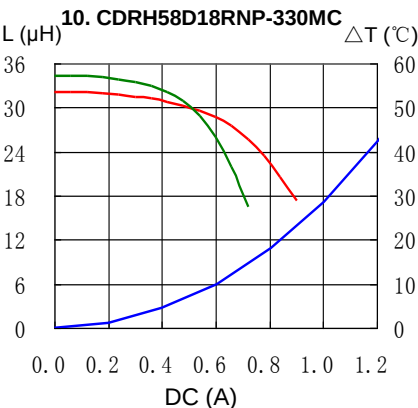
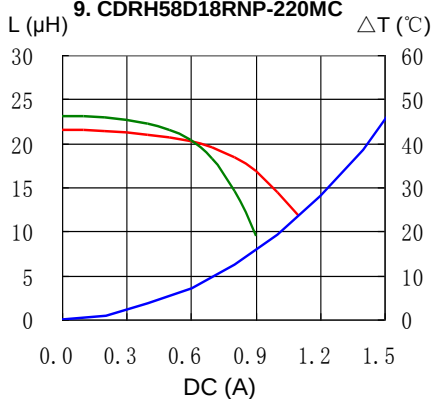
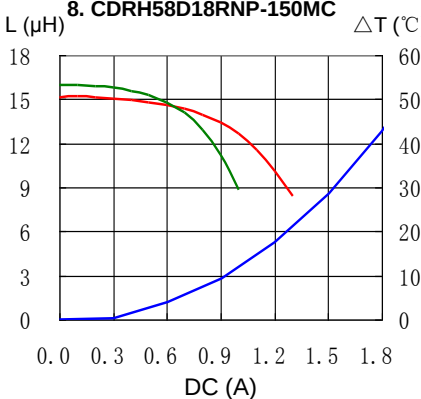
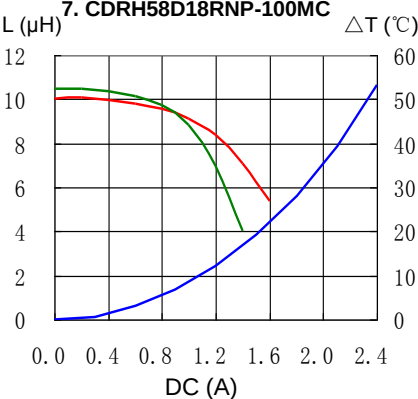
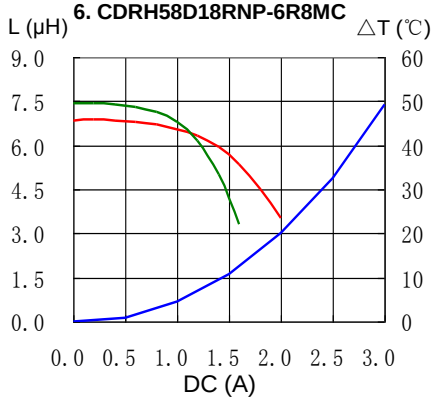
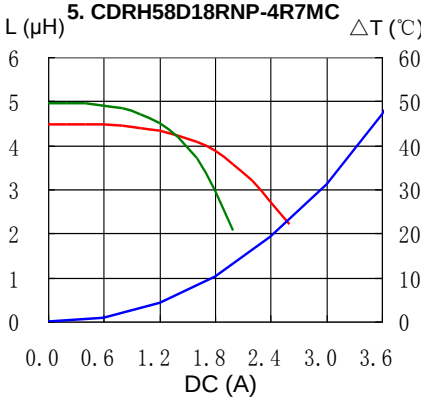
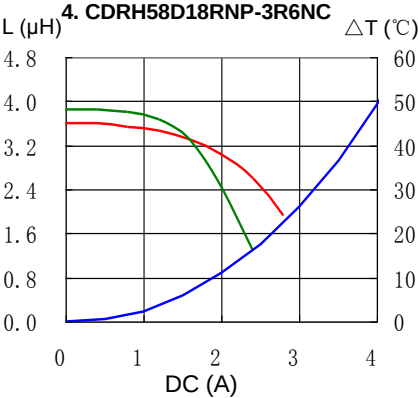
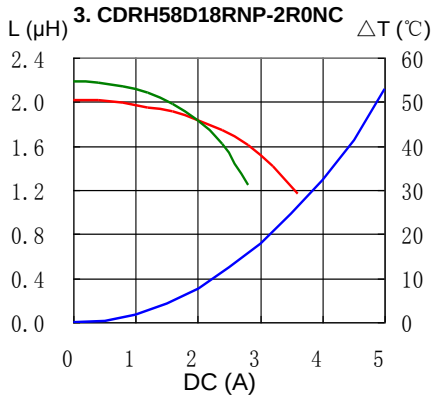
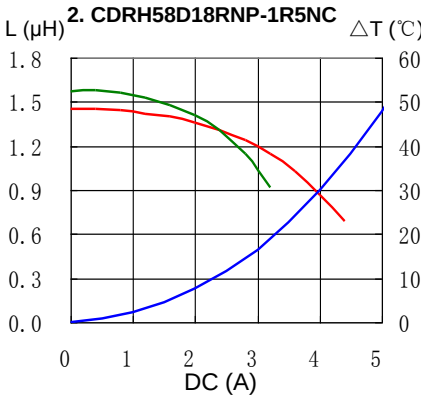
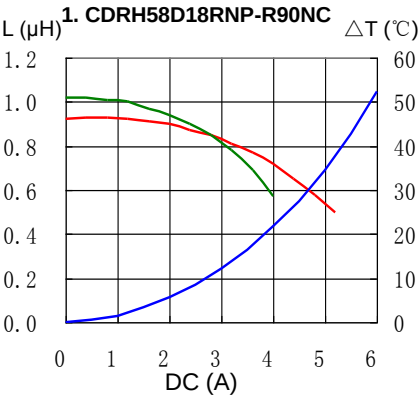
# SMD Power Inductor

## CDRH58D18R



### Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

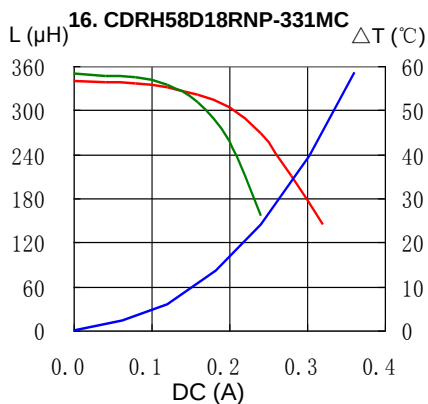
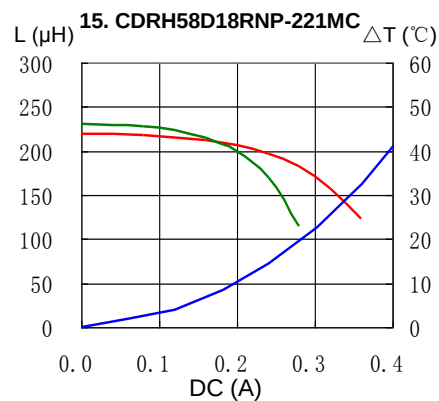
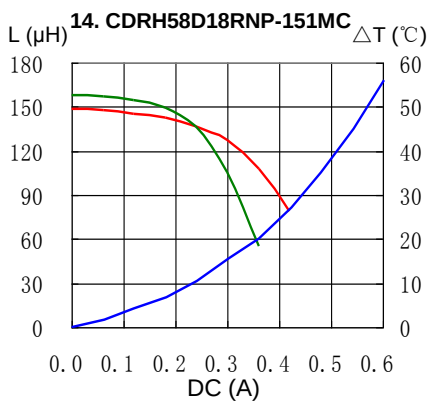
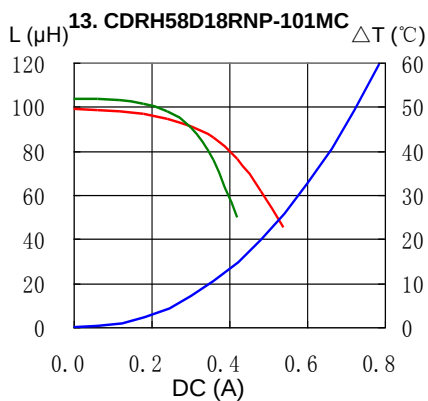


# SMD Power Inductor CDRH58D18R



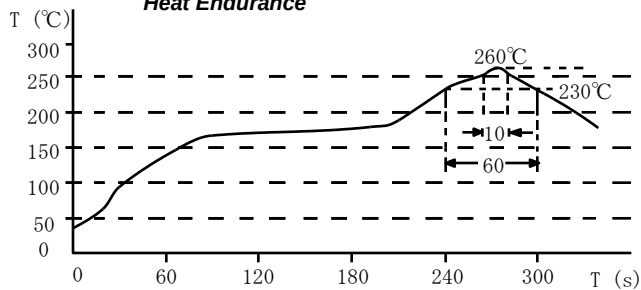
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

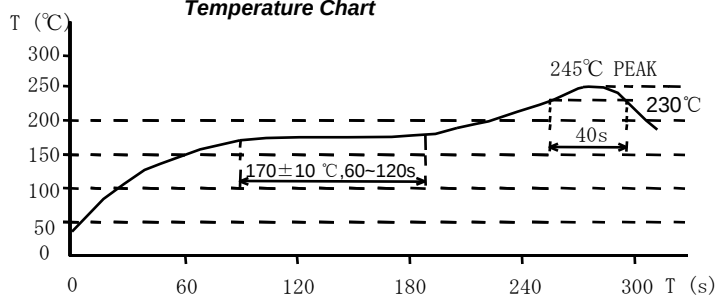


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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