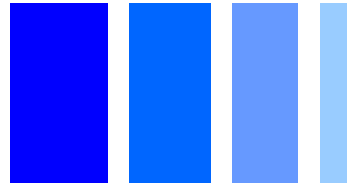


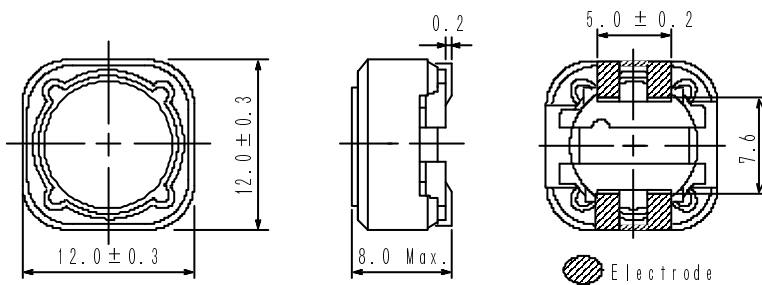
SMD Power Inductor CDRH127/L125



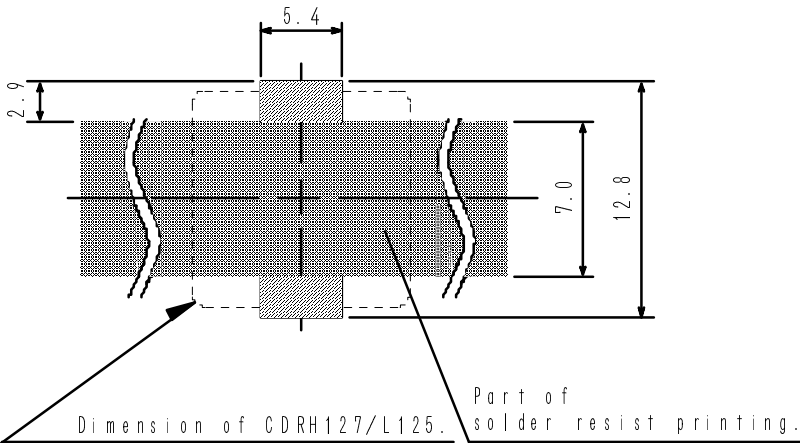
Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.3 × 12.3 × 8.0 mm Max.
- Product weight: 4.1g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.
- Qualified to AEC-Q200.

Dimension - [mm]



Land pattern and Schematics - [mm]



Environmental Data

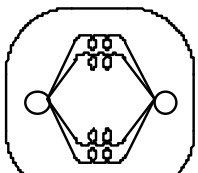
- Operating temperature range: -40°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+125°C
- Solder reflow temperature: 260 °C peak.

Packaging

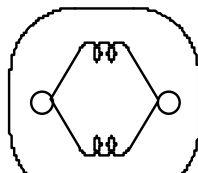
- Carrier tape and reel packaging
- 13.0" diameter reel
- 500pcs per reel

Applications

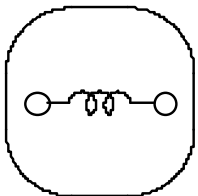
- Automotive.



2.7 μ H ~ 47 μ H



68 μ H ~ 150 μ H



220 μ H ~ 1.0 mH

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CDRH127/L125



Electrical Characteristics

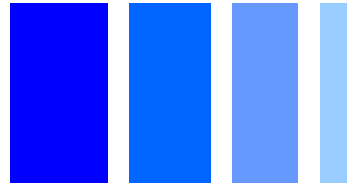
| Part Name | Stamp | Inductance (μ H) ※1 | D.C.R.(m Ω) Max.(Typ.) (at 20°C) | Saturation Current (A) ※2 | | Temperature Rise Current (A) ※3 |
|---------------------|-------|-----------------------------|--|------------------------------|----------|---------------------------------------|
| | | | | at 20°C | at 125°C | |
| CDRH127L125NP-2R7NC | 2R7 | 2.7 \pm 30% | 9.7(7.5) | 15.50 | 13.80 | 9.00 |
| CDRH127L125NP-3R6NC | 3R6 | 3.6 \pm 30% | 11.0(8.5) | 13.80 | 10.80 | 8.30 |
| CDRH127L125NP-4R7NC | 4R7 | 4.7 \pm 30% | 13.0(10.0) | 12.30 | 9.85 | 7.80 |
| CDRH127L125NP-6R2NC | 6R2 | 6.2 \pm 30% | 14.6(11.3) | 10.20 | 8.20 | 7.50 |
| CDRH127L125NP-7R5NC | 7R5 | 7.5 \pm 30% | 16.3(12.6) | 9.20 | 7.37 | 7.00 |
| CDRH127L125NP-100MC | 100 | 10 \pm 20% | 23.6(18.2) | 8.40 | 6.60 | 6.00 |
| CDRH127L125NP-150MC | 150 | 15 \pm 20% | 26.2(20.2) | 6.40 | 5.30 | 5.60 |
| CDRH127L125NP-220MC | 220 | 22 \pm 20% | 36.7(28.3) | 5.60 | 4.40 | 4.60 |
| CDRH127L125NP-330MC | 330 | 33 \pm 20% | 53.0(40.8) | 4.30 | 3.40 | 3.80 |
| CDRH127L125NP-470MC | 470 | 47 \pm 20% | 83.2(64.0) | 3.90 | 3.15 | 3.10 |
| CDRH127L125NP-680MC | 680 | 68 \pm 20% | 111.5(85.8) | 3.10 | 2.50 | 2.60 |
| CDRH127L125NP-101MC | 101 | 100 \pm 20% | 171.2(131.7) | 2.60 | 2.10 | 2.00 |
| CDRH127L125NP-151MC | 151 | 150 \pm 20% | 236(182) | 2.10 | 1.70 | 1.80 |
| CDRH127L125NP-221MC | 221 | 220 \pm 20% | 347(267) | 1.75 | 1.50 | 1.40 |
| CDRH127L125NP-331MC | 331 | 330 \pm 20% | 478(382) | 1.42 | 1.12 | 1.18 |
| CDRH127L125NP-471MC | 471 | 470 \pm 20% | 731(585) | 1.20 | 0.96 | 0.95 |
| CDRH127L125NP-681MC | 681 | 680 \pm 20% | 1102(882) | 0.98 | 0.79 | 0.75 |
| CDRH127L125NP-102MC | 102 | 1000 \pm 20% | 1495(1196) | 0.83 | 0.66 | 0.64 |

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

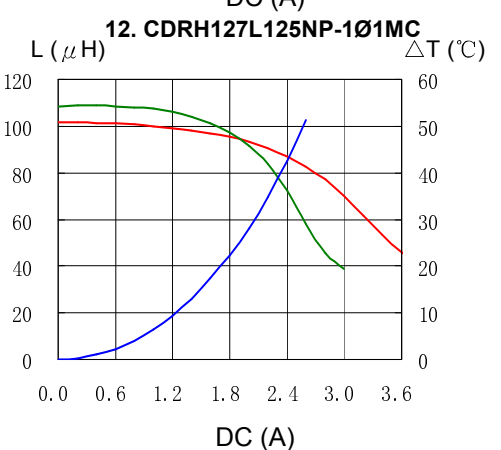
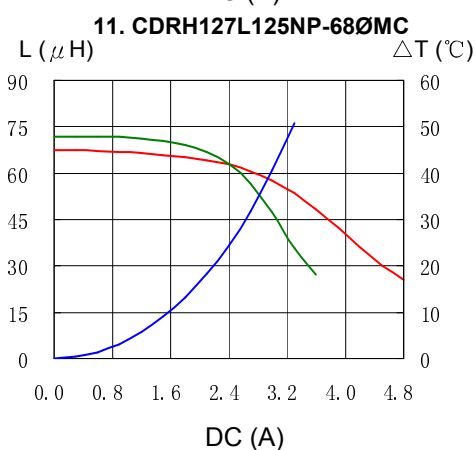
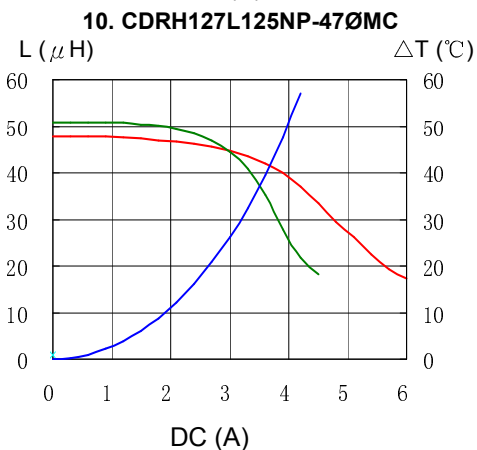
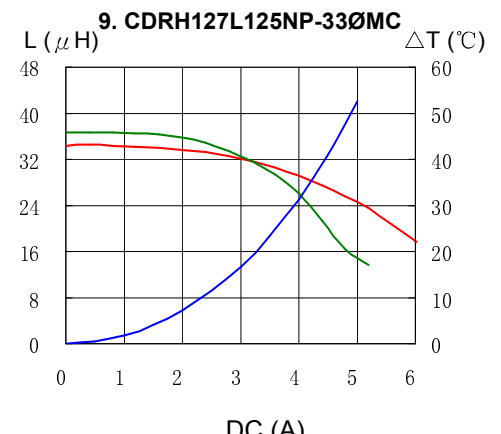
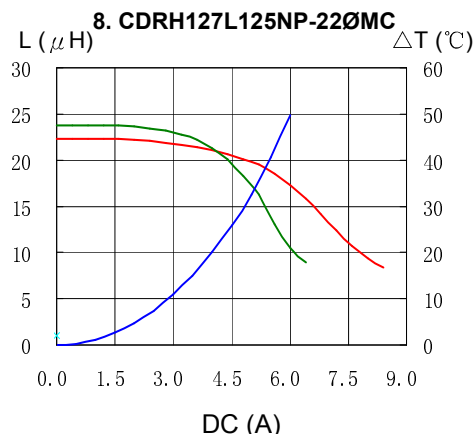
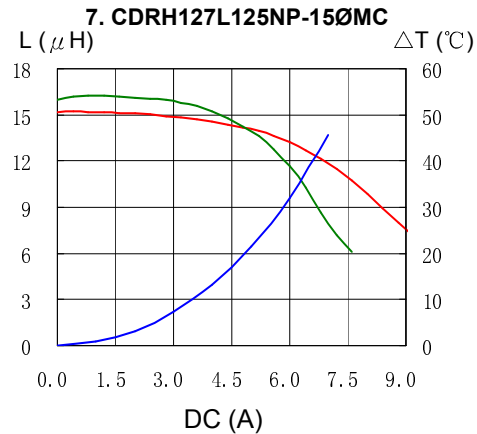
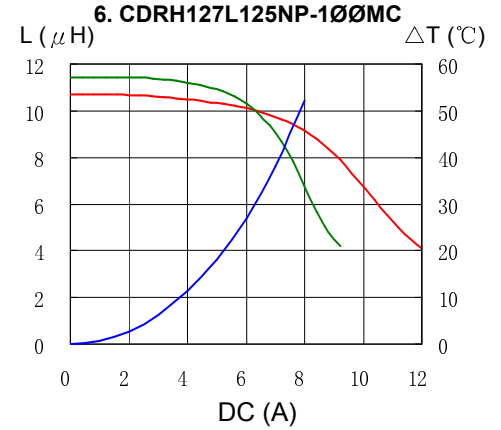
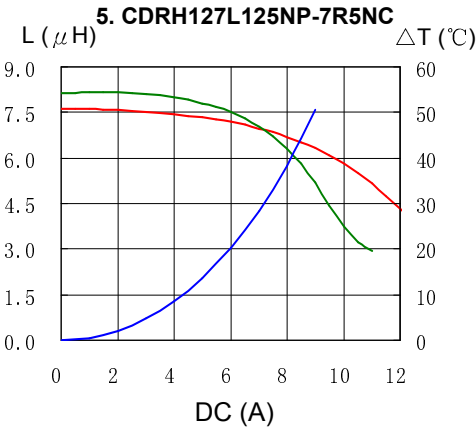
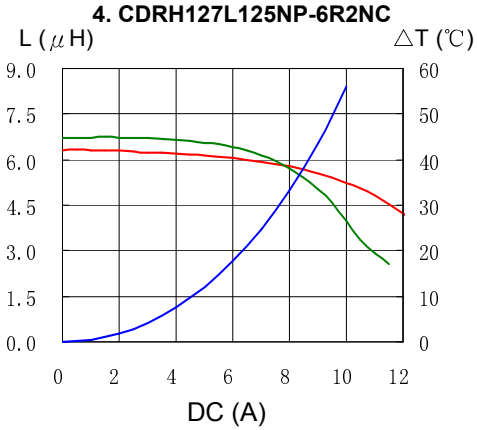
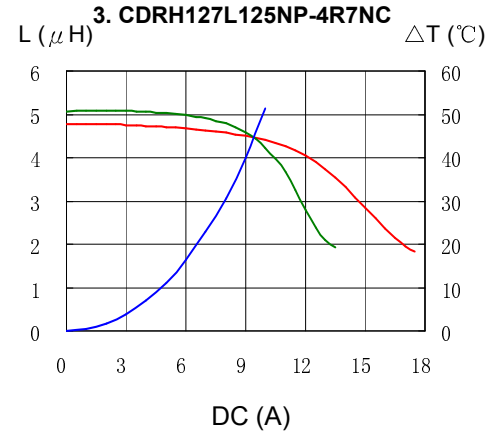
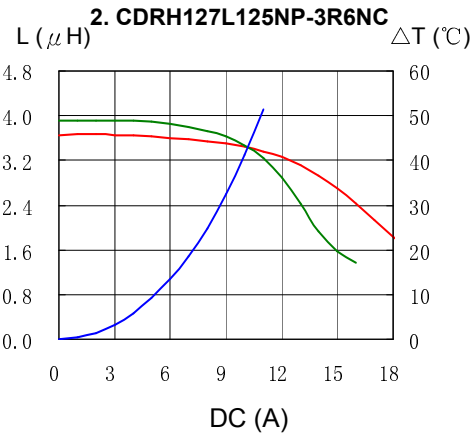
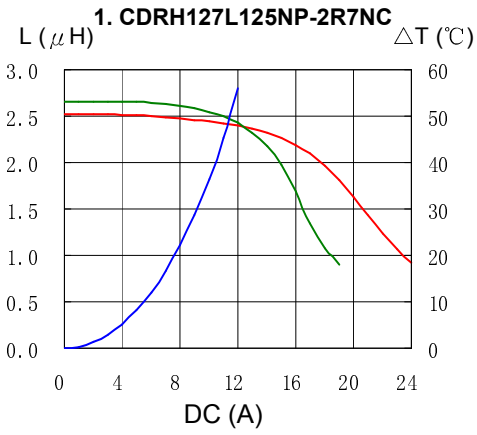
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

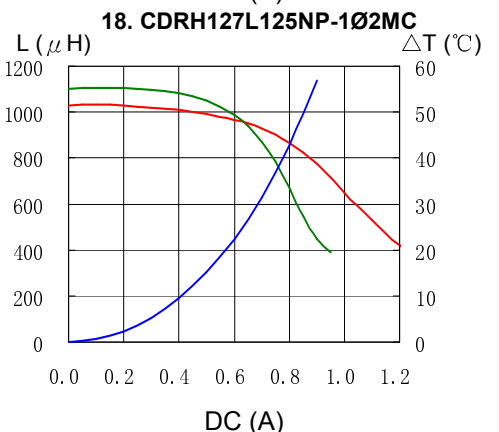
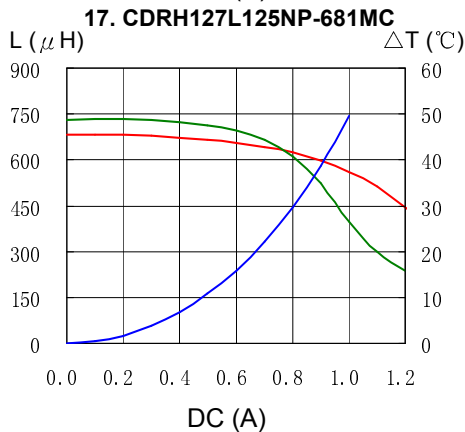
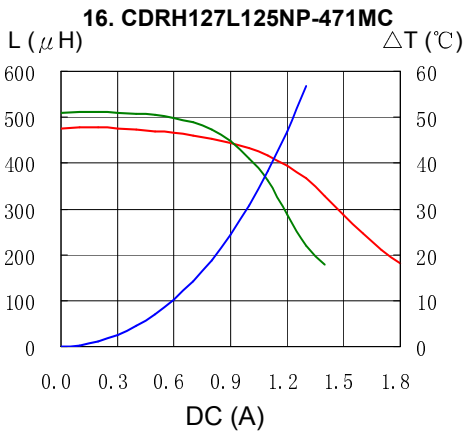
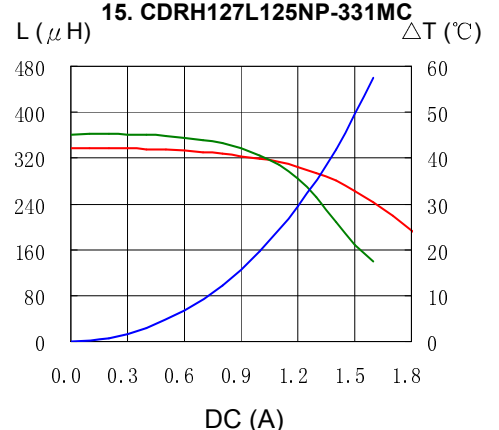
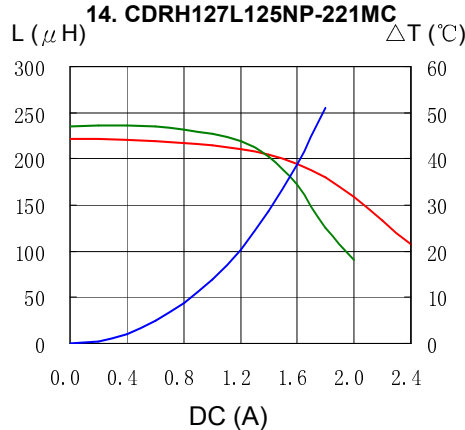
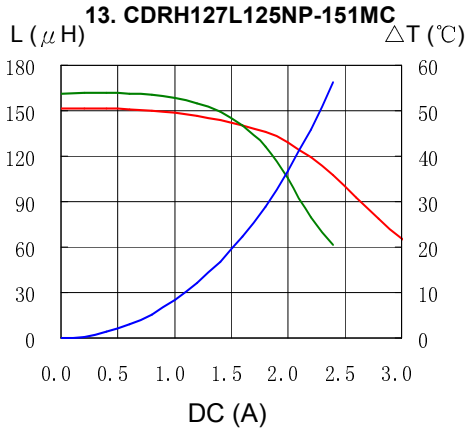
— L (20°C) — L (125°C) — ΔT



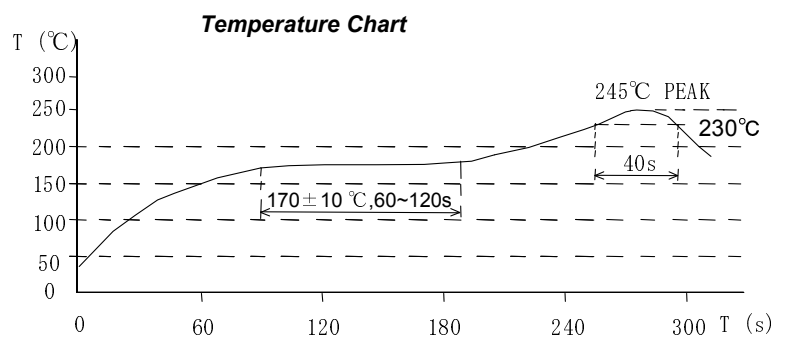
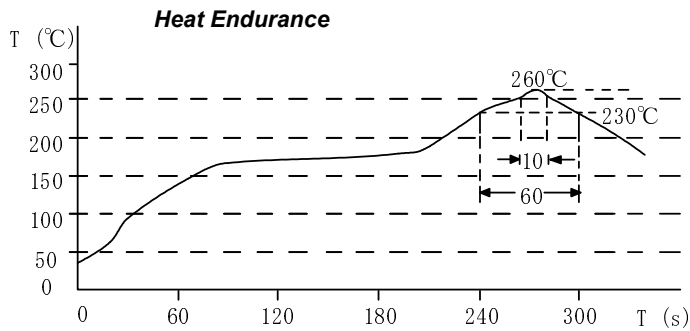
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— L (20°C) — L (125°C) — ΔT



Solder Reflow Condition



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