

Low-Profile High Current Power Inductor

CY252012LT125DS



Description

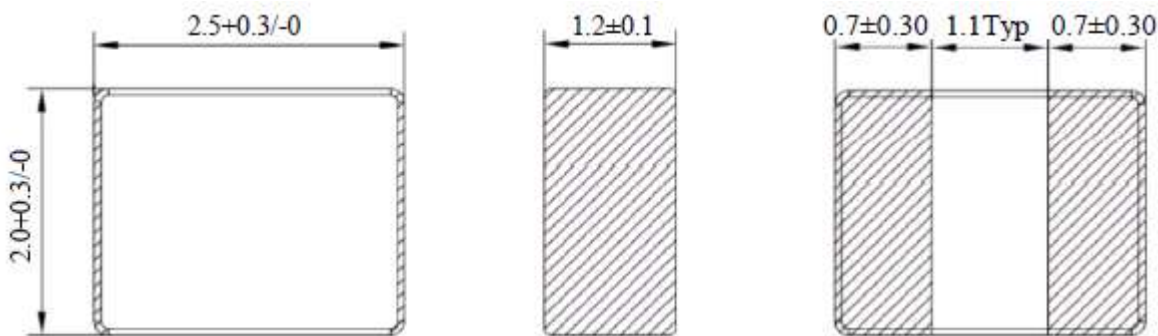
- Metal composite type
- L x W x H: 2.80 x 2.30 x 1.30 mm Max.
- Absolute maximum voltage (across inductor): 25V
- Magnetically shielded
- AEC-Q200 qualified
- Operating temperature range: -40°C~ +125°C (including self-heating)



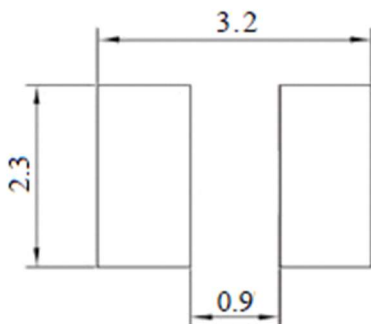
Applications

- Infotainment, Cluster meter, ECU, ADAS
- Other automotive grade, high temperature and high reliability applications

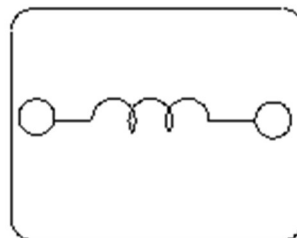
Dimension - [mm]



Reference Land pattern - [mm]



Connection



Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

Low-Profile High Current Power Inductor

CY252012LT125DS



Electrical Characteristics

| Part No. | Inductance [within] (μH) ※1 | D.C.R ($\text{m}\Omega$) at 25°C Max. (Typ.) | Saturation Current (A) (at 25°C) Max. (Typ.) ※2 | Temperature Rise Current (A) Max. (Typ.) ※3 |
|-----------------------|--|--|---|--|
| CY252012LT125DS-R22MT | 0.22±20% | 16.6 (14.5) | 8.7 (10.9) | 8.0 (9.0) |
| CY252012LT125DS-R33MT | 0.33±20% | 22.0 (19.0) | 7.0 (8.9) | 6.2 (7.1) |
| CY252012LT125DS-R47MT | 0.47±20% | 23.0 (20.0) | 5.8 (7.2) | 5.5 (6.3) |
| CY252012LT125DS-R68MT | 0.68±20% | 34.0 (29.5) | 5.5 (6.9) | 4.6 (5.2) |
| CY252012LT125DS-1R0MT | 1.0±20% | 50.5 (44.0) | 5.2 (6.6) | 3.8 (4.2) |
| CY252012LT125DS-1R5MT | 1.5±20% | 69.0 (60.0) | 3.5 (4.4) | 3.2 (3.6) |
| CY252012LT125DS-2R2MT | 2.2±20% | 86.0 (75.0) | 3.2 (4.0) | 2.8 (3.2) |
| CY252012LT125DS-3R3MT | 3.3±20% | 138.0 (120.0) | 2.5 (3.1) | 2.1 (2.4) |
| CY252012LT125DS-4R7MT | 4.7±20% | 218.5 (190.0) | 2.1 (2.6) | 1.6 (1.9) |
| CY252012LT125DS-6R8MT | 6.8±20% | 253.0 (220.0) | 1.8 (2.1) | 1.5 (1.7) |
| CY252012LT125DS-100MT | 10±20% | 391.0 (340.0) | 1.4 (1.8) | 1.2 (1.4) |

※1 Measuring frequency inductance at 1MHz, 1V

※2 Saturation current: This indicates the value of DC current when the inductance becomes 30% lower than its initial value.

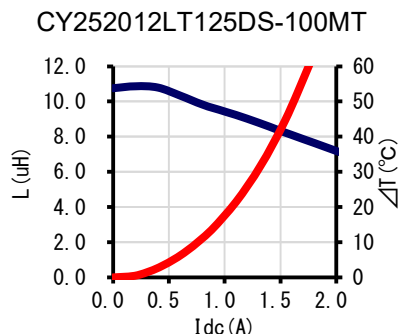
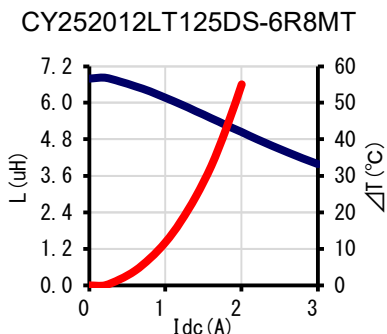
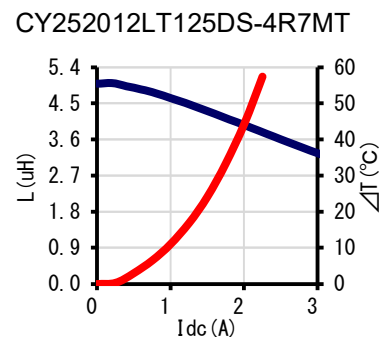
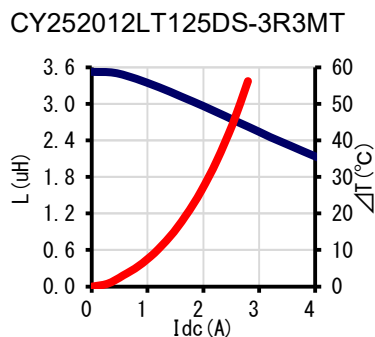
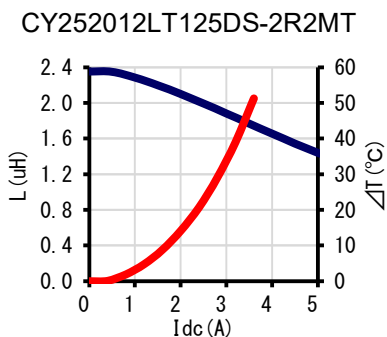
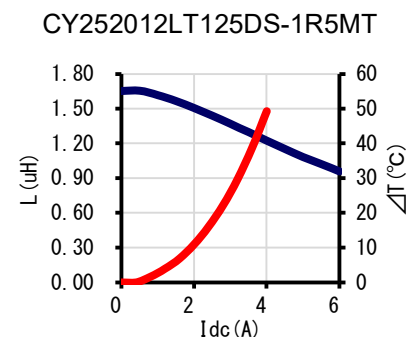
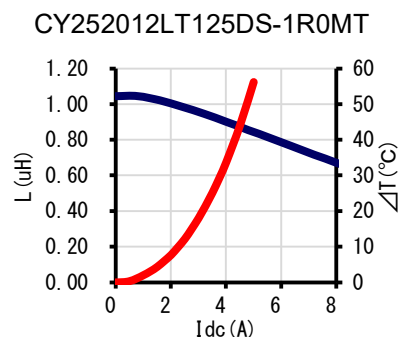
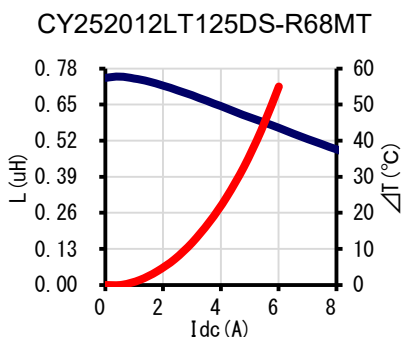
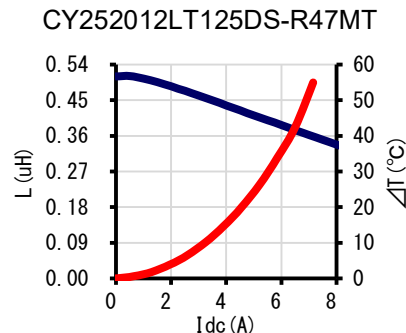
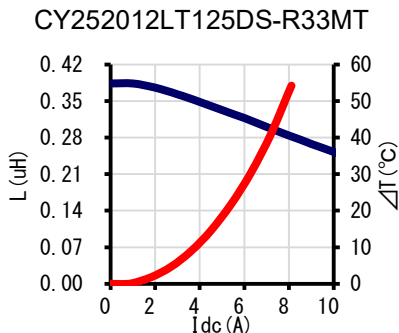
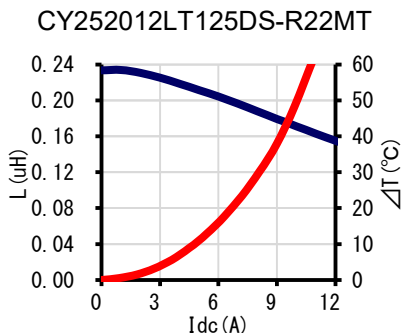
※3 The value of DC current when the temperature of coil becomes $\Delta T=40^\circ\text{C}$ ($T_a=25^\circ\text{C}$).

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

Low-Profile High Current Power Inductor CY252012LT125DS



Saturation Current & Temperature Rise Graph — L (25°C) — ΔT

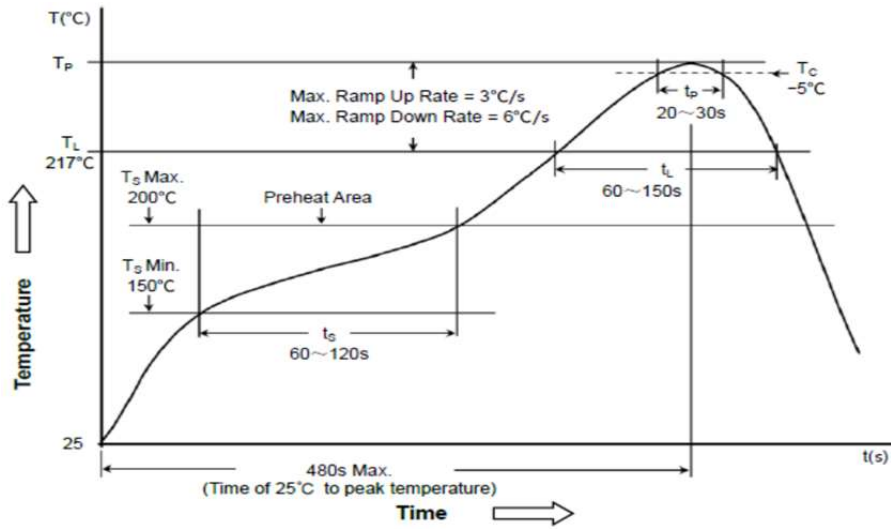


Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

Low-Profile High Current Power Inductor CY252012LT125DS



Solder Reflow Condition



For sales office information, please visit our website (<https://www.sumida.com/>).

Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.