



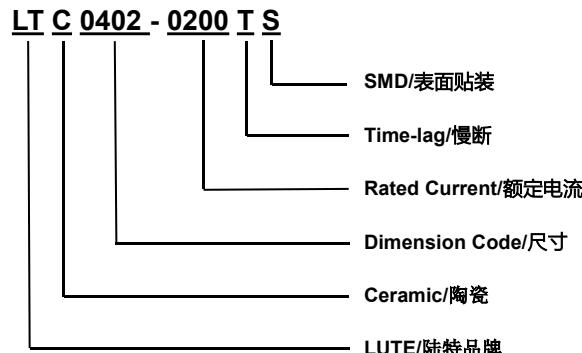
Description/描述

LTC0402TS Series are time-lag fuse, the chip fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics and also makes our chip fuses more heat and shock tolerant than typical subminiature fuses.

Features/特征

- Time-lag for excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

Part Number System/产品编号



Electrical Characteristics/电气特性

| % of Rated Current | Rated Current | Opening Time |
|--------------------|---------------|---------------------|
| 100% | 200mA~4A | 4 hours, Minimum |
| 250% | 1A~4A | 30 seconds, Maximum |
| 350% | 200mA~750mA | 30 seconds, Maximum |



Performance Specifications/电性参数

| Part Number | Rated Current (A) | Rated Voltage DC | Interrupting Rating | Cold Resistance (mΩ) | Typical Melting I ² t (A ² sec) |
|----------------|-------------------|------------------|---------------------|----------------------|---|
| LTC0402-0200TS | 0.20 | | | 2130 | 0.00068 |
| LTC0402-0250TS | 0.25 | | | 1352 | 0.0013 |
| LTC0402-0315TS | 0.315 | | | 936 | 0.0016 |
| LTC0402-0375TS | 0.375 | | | 713 | 0.0021 |
| LTC0402-0500TS | 0.50 | | | 458 | 0.0047 |
| LTC0402-0750TS | 0.75 | | | 202 | 0.013 |
| LTC0402-1100TS | 1.00 | 32V | 35A | 123 | 0.045 |
| LTC0402-1150TS | 1.50 | | | 73 | 0.071 |
| LTC0402-1200TS | 2.00 | | | 36 | 0.15 |
| LTC0402-1250TS | 2.50 | | | 22 | 0.23 |
| LTC0402-1300TS | 3.00 | | | 16 | 0.37 |
| LTC0402-1350TS | 3.50 | | | 12 | 0.51 |
| LTC0402-1400TS | 4.00 | | | 9.8 | 0.68 |

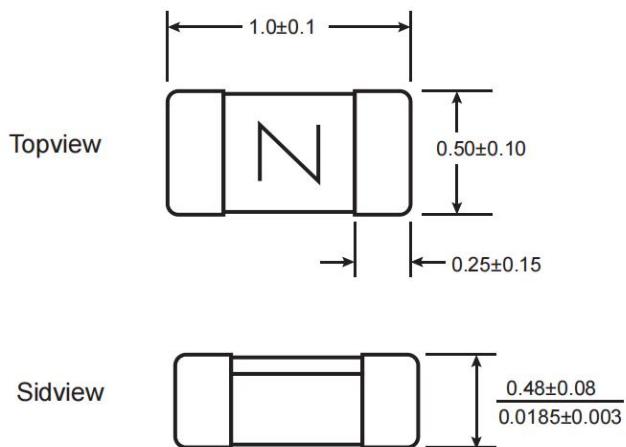
■ DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

■ DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C

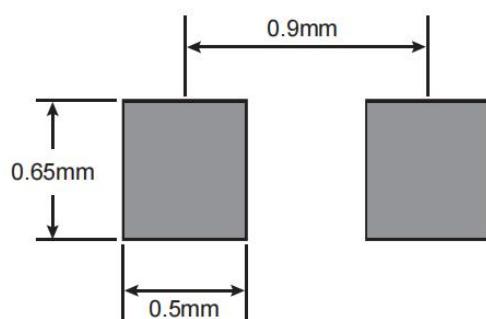
■ Typical Melting I²t (Measured with a battery bank at rated DC voltage, Measured at 1ms open time, time constant of calibrated circuit less than 50 microseconds).

Product Dimensions (mm)/产品尺寸

Drawing not to scale (Unit:mm/inch)



Recommended land pattern:

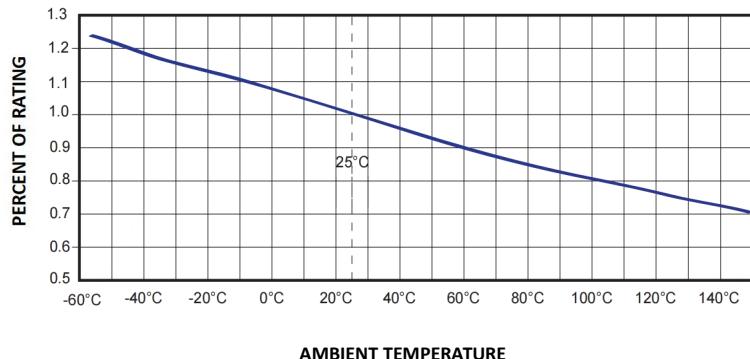


Print solder in thickness of 0.08mm to 0.10mm

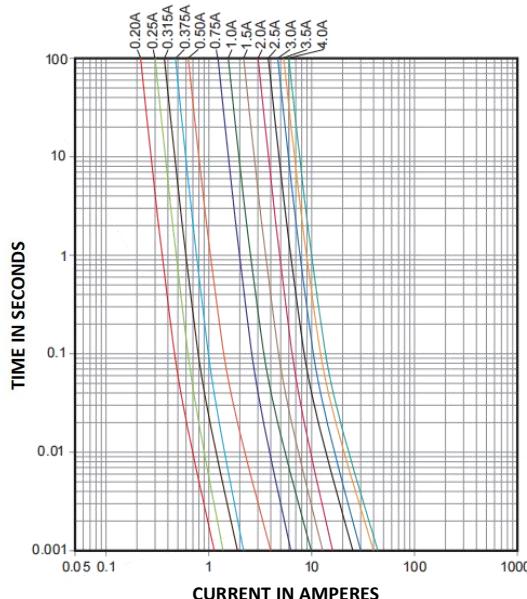


Environmental Characteristic/环境温度特性图

Temperature Derating Curve

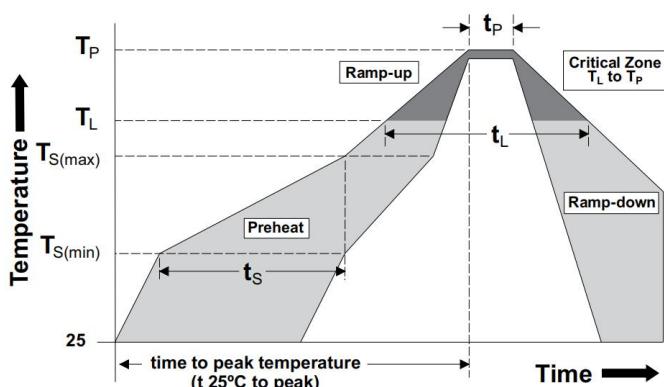


Average Time-Current Curve



- Normal ambient temperature: 23+/-3°C
- Operating temperature: -55 ~ 150°C, with proper correction factor applied.

Soldering Parameters/焊接参数



| Soldering Method | | Parameter |
|------------------|-----------------------|----------------|
| Wave Solder | Reservoir Temperature | 260°C |
| | Time in Reservoir | 10 seconds max |
| Infrared reflow | Temperature | 260°C |
| | Time | 30 seconds max |

| Profile Feature 特征 | | Pb-Free Assembly 无铅焊锡 |
|---|---|--------------------------|
| Average Ramp-Up Rate ($T_{s(max)}$ to T_p) 平均升温速度 | | 3°C/second max |
| Preheat 预热 | -Temperature Min($T_{s(min)}$) 最低温度 | 150°C |
| | -Temperature Max($T_{s(max)}$) 最高温度 | 200°C |
| | -Time($T_{s(min)}$ to $T_{s(max)}$) 预热时间 | 60~120 seconds |
| Reflow 回流焊 | -Temperature(T_L) 温度 | 217°C |
| | -Time(t_L) 时间 | 60~150 seconds |
| Peak Temperature (T_p) 峰值温度 | | 260°C |
| Ramp-Down Rate 降温 | | 6°C/second max |
| Time 25°C to Peak Temperature 从 25°C 到峰值温度时间 | | 8 minutes max |
| Time within 5°C of actual peak Temperature (t_p) | | 30 seconds |



Packing/包装

| Part Number | Quantity & Packaging Code |
|-------------|---|
| LTC0402TS | 10000 pcs/reel (8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481) |

WARNING

- If in use beyond the requirements of the specifications, must pass through the mutual confirmation !
- If the specification is not appropriate, must through consultation between the two sides and by the company to modify !
- It could be in conformance with another file which made by our company.

