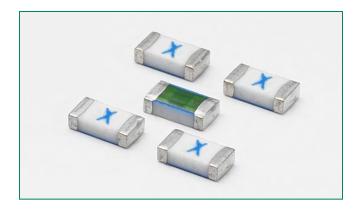
Littelfuse

440 Series, 1206 High I2t Fuse





Agency Approvals

| AGENCY | AGENCY FILE NUMBER | AMPERE RANGE | | |
|------------|--------------------|--------------|--|--|
| 71 | E10480 | .25A - 8A | | |
| ® ; | 29862 | .25A - 8A | | |

Electrical Characteristics for Series

| % of Ampere Rating | Ampere Rating | Opening Time at 25°C |
|-----------------------|---------------|----------------------|
| 100% | 0.25A - 8A | 4 hours, Minimum |
| 350% | 0.25A - 8A | 5 secs., Maximum |

Description

The 440 Series is a 100% Lead-free, RoHS compliant and Halogen-free fuse series designed specifically to provide over-current protection to circuits that operate under high working ambient temperatures up to 150°C and high inrush currents. The general design ensures excellent temperature stability and performance reliability. This high I2t fuse series is designed to have ultra high inrush current withstand capability to avoid nuisance fuse open.

Features

- Operating Temperature from -55°C to +150°C
- 100% Lead-free, RoHS
- Suitable for both leaded and lead-free reflow / wave soldering
- compliant and Halogen-free Ultra high I2t values

Applications

- LCD Displays
- Servers
- Notebook Computers
- Scanners
- Data Modems
- Hard Disk Drives

Printers

Additional Information







Resources



Samples

Electrical Specifications by Item

| Ampere | Ampere Amp Max. | | Interrupting Rating | Nominal | Nominal Nominal Voltage | Nominal Power | Agency Approvals | | |
|---------------|-----------------|-----------------------|----------------------------------|-----------------------------------|----------------------------------------------------------------|-------------------------------------------|-------------------------------------|-----|------------|
| Rating (A) | Code | Voltage Rating (V) | (AC/DC) ¹ | Resistance (Ohms) ² | Melting l ² t (A ² Sec.) ³ | Drop At Rated Current (V) ⁴ | Dissipation At Rated Current (W) | 717 | ⊕ ; |
| 0.25 | .250 | 125 | EO A @ 13E V AC/DC | 2.140 | 0.00649 | 0.5260 | 0.132 | Х | Χ |
| 0.375 | .375 | 125 | 50 A @ 125 V AC/DC | 1.216 | 0.01455 | 0.4993 | 0.187 | X | X |
| 0.5 | .500 | 63 | 50 A @ 63 V AC/DC | 0.8140 | 0.02642 | 0.4831 | 0.242 | X | X |
| 0.75 | .750 | 63 | 50 A @ 63 V AC/DC | 0.4624 | 0.09312 | 0.3983 | 0.299 | Х | X |
| 1 | 001. | 50 | 50 A @ 50 V DC 50 A @ 50 V AC | 0.3096 | 0.21054 | 0.3457 | 0.346 | X | X |
| 1.25 | 1.25 | 50 | | 0.2265 | 0.379 | 0.3240 | 0.405 | Х | X |
| 1.5 | 01.5 | 50 | 30 A @ 30 V AC | 0.1759 | 0.50652 | 0.3215 | 0.482 | X | X |
| 1.75 | 1.75 | 32 | | 0.0450 | 0.3312 | 0.0777 | 0.136 | X | X |
| 2 | 002. | 32 | | 0.0385 | 0.4326 | 0.0792 | 0.158 | X | X |
| 2.5 | 02.5 | 32 | | 0.02850 | 0.8191 | 0.0747 | 0.187 | х | X |
| 3 | 003. | 32 | | 0.02252 | 1.232 | 0.0742 | 0.223 | X | X |
| 3.5 | 03.5 | 32 | 50 A @ 32 V AC/DC | 0.01845 | 1.789 | 0.0757 | 0.265 | X | X |
| 4 | 004. | 32 | | 0.01553 | 2.601 | 0.0709 | 0.284 | X | X |
| 5 | 005. | 32 | | 0.0120 | 4.761 | 0.0654 | 0.327 | х | X |
| 7 | 007. | 32 | | 0.00753 | 8.464 | 0.0696 | 0.487 | X | X |
| 8 | 008. | 32 | | 0.00634 | 12.95 | 0.0655 | 0.524 | X | X |

Notes:

- 1. AC Interrupting Rating tested at rated voltage with unity power factor. DC Interrupting Rating tested at rated voltage with time constant < 0.8 msec.
- 2. Nominal Resistance measured with < 10% rated current.
- 3. Contact Littelfuse if application transient surges are less than 1 ms.
- 4. Nominal Voltage Drop measured at rated current after temperature has stabilized.

Devices designed to carry rated current for 4 hours minimum. It is recommended that devices be operated continuously at no more than 80% rated current. See "Temperature Derating Curve" for additional derating information.

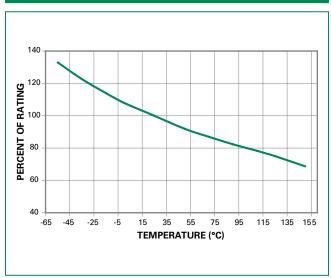
Devices designed to be mounted with marking code facing up.



Specifications are subject to change without notice. Application testing is strongly recommended. Revised: 05/15/15



Temperature Rerating Curve



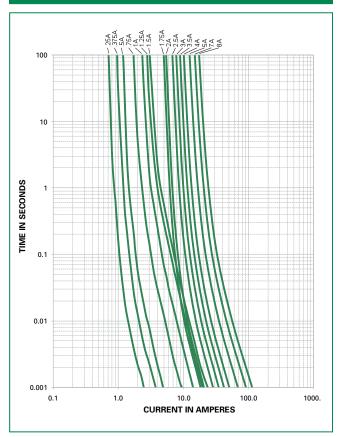
Note:

Rerating depicted in this curve is in addition to the standard derating of 20% for continuous operation.

Example:

For continuous operation at 75 degrees celsius, the fuse should be derated as follows: $I = (0.80)(0.85)I_{RAT} = (0.68)I_{RAT}$

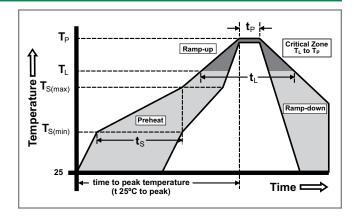
Average Time Current Curves



Soldering Parameters

| Reflow Co | ndition | Pb-free assembly | |
|---------------------------------------|------------------------------------------------|------------------|--|
| | -Temperature Min (T _{s(min)}) | 150°C | |
| Pre Heat | -Temperature Max (T _{s(max)}) | 200°C | |
| | -Time (Min to Max) (t _s) | 60 – 180 seconds | |
| Average R (T _L) to pea | amp-Up Rate (Liquidus Temp k) | 3°C/second max. | |
| T _{S(max)} to T _I | - Ramp-up Rate | 5°C/second max. | |
| D (1 | -Temperature (T _L) (Liquidus) | 217°C | |
| Reflow | -Temperature (t _L) | 60 – 150 seconds | |
| PeakTemp | erature (T _P) | 260+0/-5 °C | |
| Time with Temperatu | in 5°C of actual peak ıre (t _p) | 10 – 30 seconds | |
| Ramp-down Rate | | 6°C/second max. | |
| Time 25°C | to peakTemperature (T _P) | 8 minutes max. | |
| Do not exc | ceed | 260°C | |





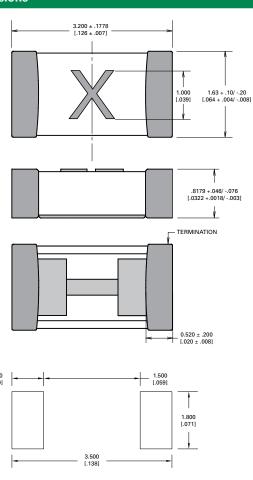


Product Characteristics

| Materials | Body: Advanced Ceramic Terminations: Ag / Ni / Sn (100% Lead-free) Element Cover Coating: Lead-free Glass | | |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------|--|--|
| Moisture Sensitivity Level | IPC/JEDEC J-STD-020, Level 1 | | |
| Solderability | IPC/ECA/JEDEC J-STD-002, Condition C | | |
| Humidity Test | MIL-STD-202, Method 103, Conditions D | | |
| Resistance to Solder Heat | MIL-STD-202, Method 210, Condition B | | |

| Moisture Resistance | MIL-STD-202, Method 106 | | |
|------------------------------|-----------------------------------------|--|--|
| Thermal Shock | MIL-STD-202, Method 107, Condition B | | |
| Mechanical Shock | MIL-STD-202, Method 213, Condition A | | |
| Vibration | MIL-STD-202, Method 201 | | |
| Vibration, High Frequency | MIL-STD-202, Method 204, Condition D | | |
| Dissolution of Metallization | IPC/ECA/JEDEC J-STD-002, Condition D | | |
| Terminal Strength | IEC 60127-4 | | |

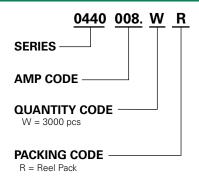
Dimensions



Part Marking System

| Amp Code | Marking Code |
|----------|--------------|
| .250 | D |
| .375 | E |
| .500 | F |
| .750 | G |
| 001. | Н |
| 1.25 | J |
| 01.5 | K |
| 1.75 | L |
| 002. | N |
| 02.5 | 0 |
| 003. | P |
| 03.5 | R |
| 004. | S |
| 005. | Т |
| 007. | W |
| 008. | X |

Part Numbering System



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code |
|-------------------|----------------------------|----------|------------------------------|
| 8mm Tape and Reel | EIA-481, IEC 60286, Part 3 | 3000 | WR |

单击下面可查看定价,库存,交付和生命周期等信息

>>Littelfuse(美国力特)