

SF-1206SP175L-2-A9 - Time Lag Ceramic Cavity Laminate SMD Fuse

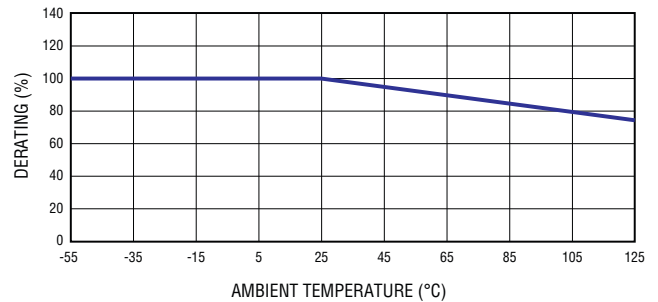


Environmental Characteristics

| | |
|--------------------------------------|--------------------|
| Operating Temperature | -55 °C to + 125 °C |
| Storage Conditions | |
| Temperature | +15 °C to +30 °C |
| Humidity | 20 % to 70 % |
| Shelf Life (from manufacturing date) | 2 years |
| Moisture Sensitivity Level | 1 |
| ESD Classification ¹ | Class 6 |

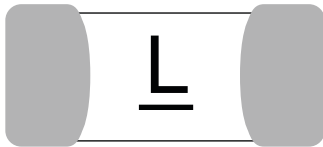
¹per AEC-Q200-2, HBM

Current Rating Thermal Derating Curve



Typical Part Marking

Represents total content. Layout may vary.



| Rated Current | Part Marking |
|---------------|--------------|
| 1.75 A | L |

How to Order

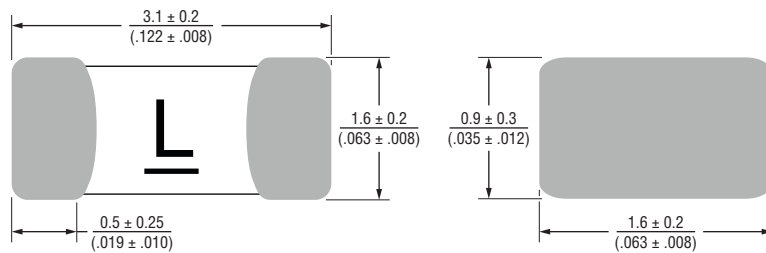
SF - 1206 SP 175 L - 2 - A9

SingIFuse™
 Product Designator
 SMD Footprint
 1206 = EIA 1206
 (3216 metric)
 Fuse Blow Type
 SP = Time Lag
 Rated Current
 175 = 1.75 A
 Structure Type
 L = Ceramic Cavity Laminate
 Packaging Type
 - 2 = Tape & Reel
 TNA (Type Number Assignment)
 Designator

Packaging

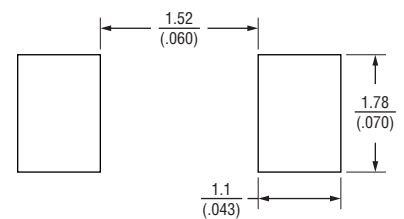
| | |
|----------------|----------------------|
| Reel Dimension | 7-inch Tape and Reel |
| Specification | EIA 481-2 |
| Quantity | 4,000 pieces |
| Packaging Code | -2 |

Product Dimensions



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Recommended Pad Layout



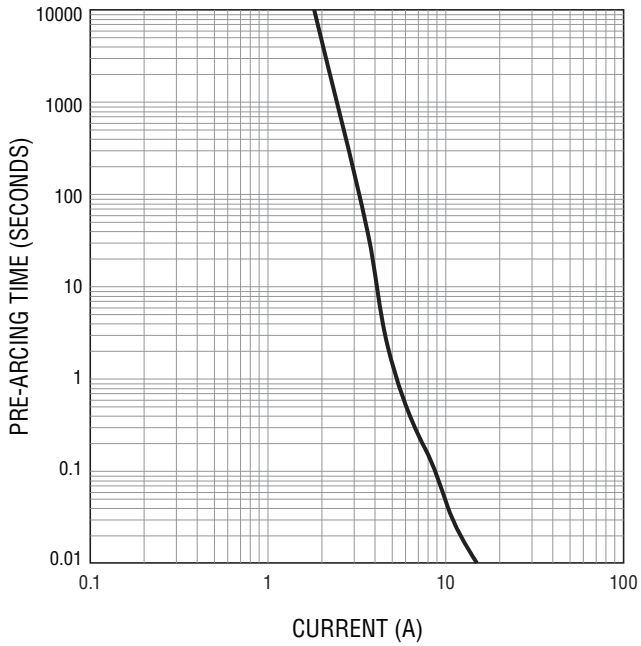
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Specifications are subject to change without notice.

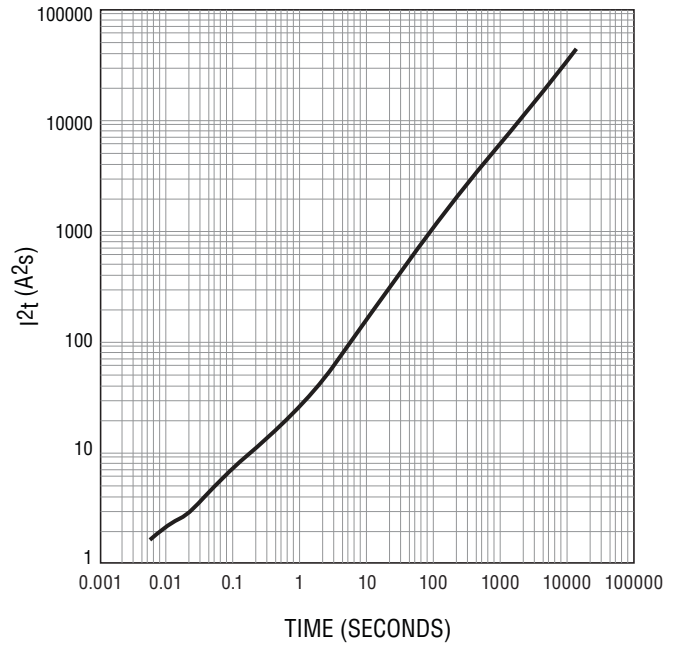
Users should verify actual device performance in their specific applications.

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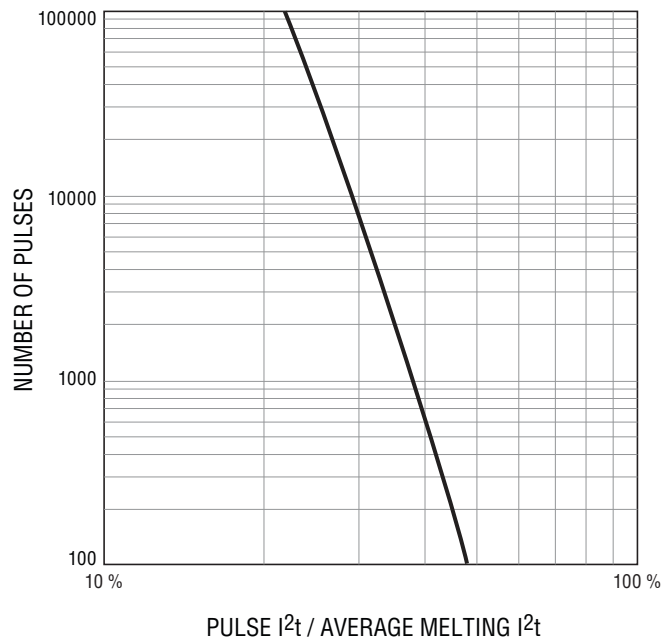
Average Pre-Arcing Time vs. Current Curves



Average I^2t vs. t Curves



Pulse Cycle Withstand Capability

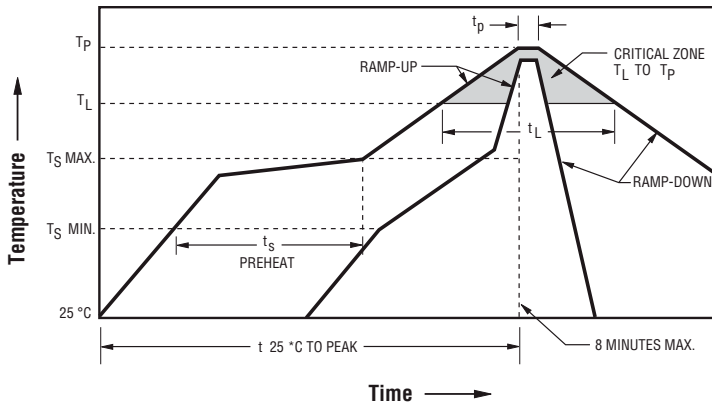


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Solder Reflow Recommendations

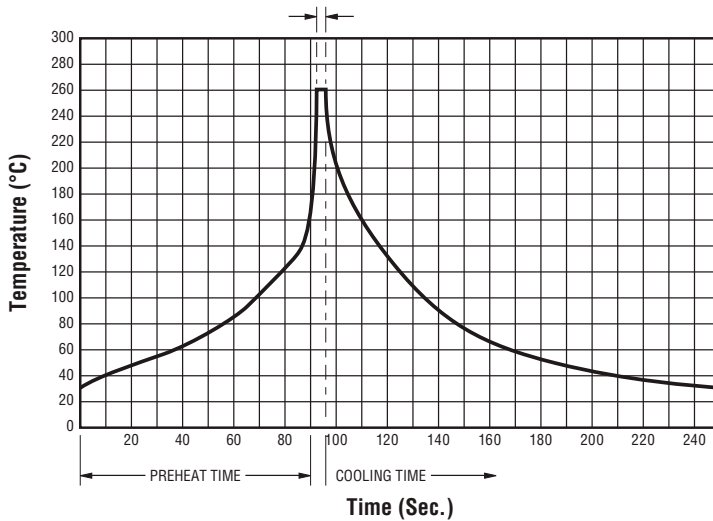


| Profile Feature | Pb-Free Assembly |
|---|------------------------------------|
| Preheat / Soak: Temperature Min. (T_{Smin}) Temperature Max. (T_{Smax}) Time (t_s) from (T_{Smin} to T_{Smax}) | 150 °C 200 °C 60-180 seconds |
| Ramp Up Rate (T_L to T_P) | 3 °C / second max. |
| Ramp Up Rate (T_{Smax} to T_L) | 5 °C / second max. |
| Liquidous Temperature (T_L) Time (t_L) maintained above T_L | 217 °C 60-150 seconds |
| Peak Temperature (T_P) | 260 +0/-5 °C |
| Time within 5 °C of actual peak temperature (t_p) | 10-30 seconds* |
| Ramp Down Rate (T_P to T_L) | 6 °C / second max. |
| Time 25 °C to Peak Temperature ($t_{25\ ^\circ C\ to\ peak}$) | 8 minutes max. |
| Do not exceed | 260 °C |

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

Solder Wave Recommendations

Peak Temperature (Dwell Time)



| Profile Feature | Pb-Free Assembly |
|--|-------------------------|
| Preheat: Temperature Max. (T_{Smax}) Time (Min. to Max.) | 150 °C 60-90 seconds |
| Solder Pot Temperature | 260 °C max. |
| Solder Dwell Time | 2-3 seconds |

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