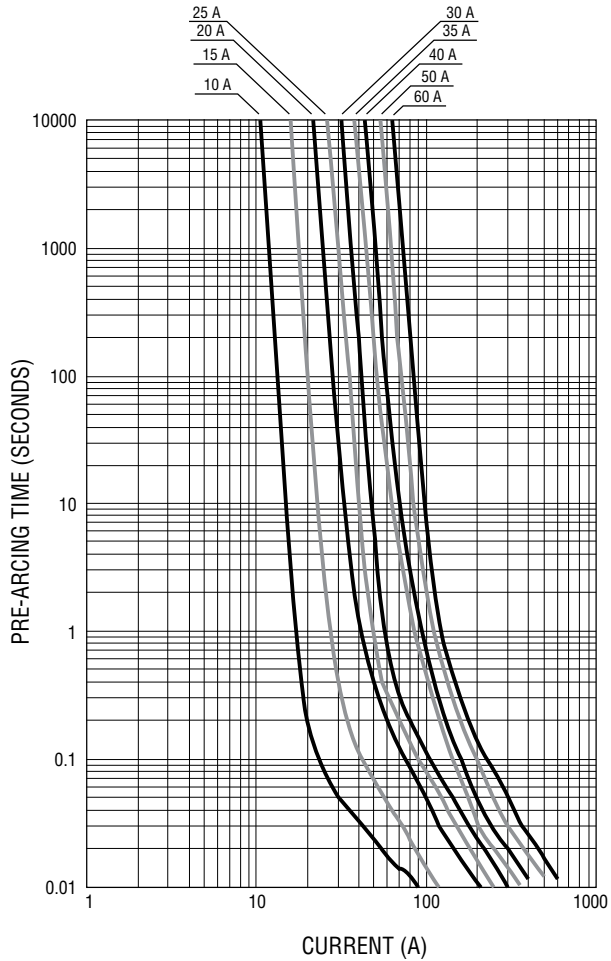


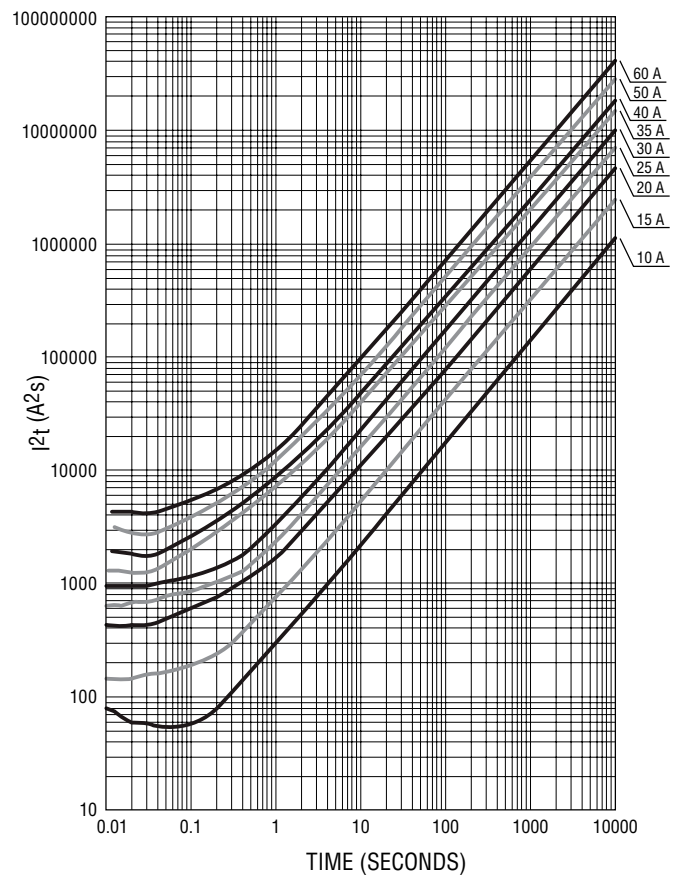
## SF-3812F-T Series – Fast Acting SMD Fuses

**BOURNS®**

Average Pre-Arcing Time vs. Current Curves



Average  $I^2t$  vs.  $t$  Curves



Specifications are subject to change without notice.

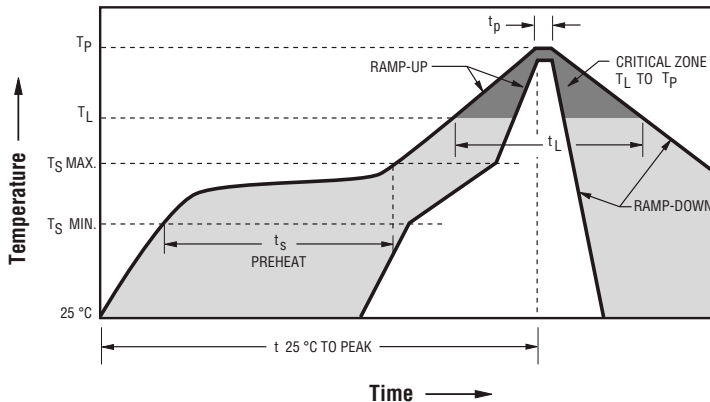
Users should verify actual device performance in their specific applications.

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## SF-3812F-T Series – Fast Acting SMD Fuses

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### Solder Reflow Recommendations

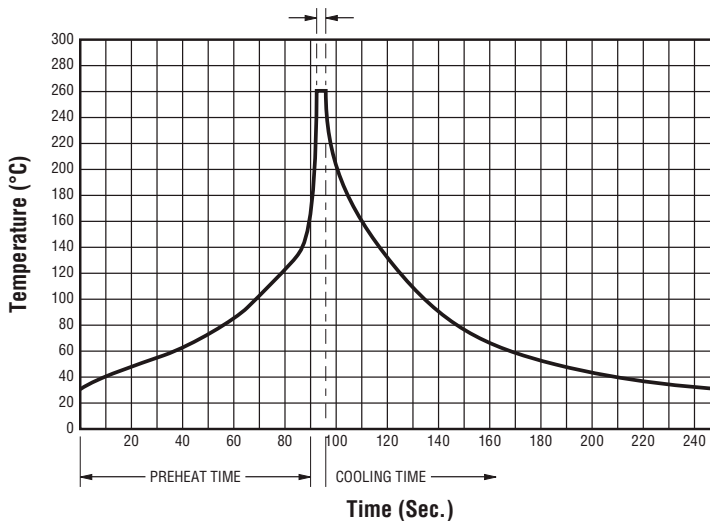


| Profile Feature                                       | Pb-Free Assembly   |
|-------------------------------------------------------|--------------------|
| Preheat / Soak:                                       |                    |
| Temperature Min. ( $T_{smin}$ )                       | 150 °C             |
| Temperature Max. ( $T_{smax}$ )                       | 200 °C             |
| Time ( $t_s$ ) from ( $T_{smin}$ to $T_{smax}$ )      | 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 ( $T_L$ )                       | 217 °C             |
| Time ( $t_L$ ) maintained above $T_L$                 | 60~150 seconds     |
| Peak Package Body Temperature ( $T_p$ )               | 260 °C +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                        | 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. ( $T_{smax}$ ) | 150 °C           |
| Time (Min. to Max.)             | 60~90 seconds    |
| Solder Pot Temperature          | 260 °C max.      |
| Solder Dwell Time               | 2~3 seconds      |

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