

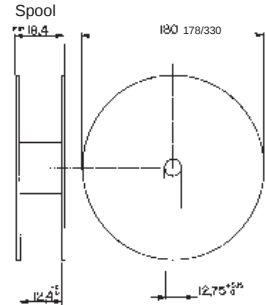
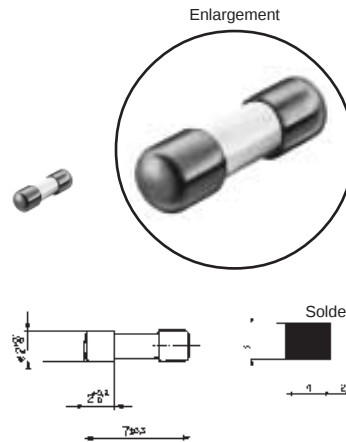
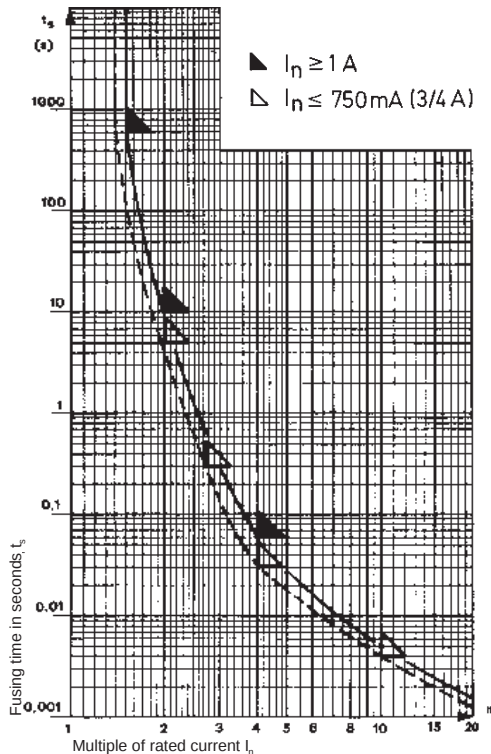
# MELF 125V Quick-acting Surface Mount Fuse - High Breaking Capacity



UL 248-14 (formerly 198 G)  
CSA C22.2 No. 248.14 (formerly 59.2M)

**Approvals:** (reference series 172876)

UL recognition 125mA-7A File #E42088  
CSA certification 125mA-7A File #LR34549



Time Current Characteristics ( $T_{amb} = 25^\circ \text{C}$ )

| $n^2 \cdot I_n$     | $I_n$ | $1.5 \cdot I_n$ | $2 \cdot I_n$ | $2.75 \cdot I_n$ | $4 \cdot I_n$ | $10 \cdot I_n$ |
|---------------------|-------|-----------------|---------------|------------------|---------------|----------------|
| rated current $I_n$ | min.  | max.            | max.          | max.             | max.          | max.           |
| 125mA – 750mA       | 4 h   | –               | 5 s           | 300 ms           | 30 ms         | 4 ms           |
| 1A – 7A             | 4 h   | 600 s           | 10 s          | –                | 60 ms         | –              |



For information about Melf miniature SMD and through-hole mount fuseholders, see page 87

## Technical Data

|                                        |                                                                                                                             |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Rated voltage $U_n$                    | 125 V AC/DC                                                                                                                 |
| Rated current                          | see chart                                                                                                                   |
| Time current characteristic            | quick-acting, see chart for values                                                                                          |
| Marking                                | on fuse: rated current, $\square$ ; on smallest package: type, rated current, volts, breaking capacity, $\square$ , UL, CSA |
| Ambient temperature max. $T_{amb}$     | -55°C to +85°C                                                                                                              |
| Solderability (reflow and vapor phase) | 235°C/2 sec. (IEC 68-2-58/Td)                                                                                               |
| Soldering heat resistance              | 235°C/5 sec. (IEC 68-2-58/Td)                                                                                               |
| Material: Housing                      | ceramic                                                                                                                     |
| End caps                               | brass, tin-plated                                                                                                           |
| Net weight (per hundred)               | 6.9g                                                                                                                        |

| Order Numbers    | Rated current / rated voltage | Breaking capacity        | Voltage drop at $1 \cdot I_n$ | Power dissipation at $1 \cdot I_n$ | Fusing $I^2 t$ at $10 \cdot I_n$ | Packaging | Approvals |
|------------------|-------------------------------|--------------------------|-------------------------------|------------------------------------|----------------------------------|-----------|-----------|
| Series MELF 125V | mA / A / V                    | A ~ ac/dc                | max. mV                       | max. Watts                         | A <sup>2</sup> s                 |           | UL CSA    |
| 7010.9760.XX*    | 125 mA / 125V                 | on printed boards        | 900                           | 0.113                              | 0.00082                          |           | • •       |
| 7010.9770.XX     | 250 mA / 125V                 | 300A/125 V AC cos w = 1  | 330                           | 0.083                              | 0.005                            |           | • •       |
| 7010.9780.XX     | 375 mA / 125V                 | 300A/125V DC, L/R = 1 ms | 240                           | 0.1                                | 0.021                            |           | • •       |
| 7010.9790.XX     | 500 mA / 125V                 |                          | 240                           | 0.12                               | 0.038                            |           | • •       |
| 7010.9800.XX     | 750 mA / 125V                 |                          | 240                           | 0.18                               | 0.074                            |           | • •       |
| 7010.9810.XX     | 1 A / 125V                    | inserted into fuseholder | 240                           | 0.24                               | 0.16                             |           | • •       |
| 7010.9820.XX     | 1.5 A / 125V                  | $I_n$ 125mA–4A:          | 240                           | 0.36                               | 0.34                             |           | • •       |
| 7010.9830.XX     | 2 A / 125V                    | 300A/125 V AC cos w = 1  | 240                           | 0.48                               | 0.64                             |           | • •       |
| 7010.9840.XX     | 2.5 A / 125V                  | 300A/125V DC, L/R = 1 ms | 220                           | 0.55                               | 1.2                              |           | • •       |
| 7010.9850.XX     | 3 A / 125V                    |                          | 220                           | 0.66                               | 1.7                              |           | • •       |
| 7010.9860.XX     | 3.5 A / 125V                  |                          | 200                           | 0.7                                | 2.9                              |           | • •       |
| 7010.9870.XX     | 4 A / 125V                    | $I_n$ 5A–7A:             | 200                           | 0.8                                | 3.9                              |           | • •       |
| 7010.9880.XX     | 5 A / 125V                    | 300A/125 V AC cos w = 1  | 200                           | 1                                  | 4.7                              |           | • •       |
| 7010.9890.XX**   | 7 A / 125V                    | 50A/125V DC, L/R = 1 ms  | 200                           | 1.4                                | 10.5                             |           | • •       |

\* 125mA fuse: clearing times should be determined in the end use application, according to U Conditions 6 Acceptability

\*\* 7A fuse: when used in conjunction with Melf holder, UL acceptability is determined in the end use application