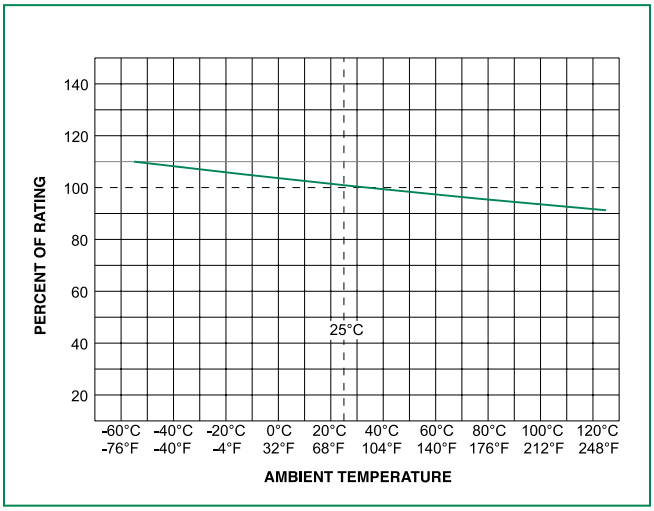
## Electrical Characteristic

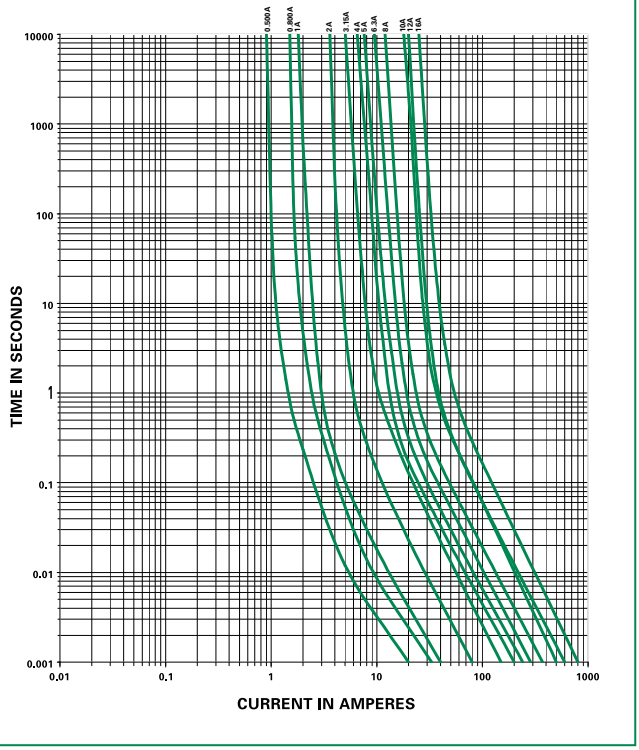
| Amp Code | Amp Rating | Max Voltage Rating (V) | | Interrupting Rating | Nominal Cold Resistance (Milli-ohms) | Nominal Melting $I^2t$ ($A^2$ sec.)† | Agency Approvals | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AC | DC | | | | PS E | c UL us | | | VDE |
| .500 | 0.5 | 500 | 400 | 100A@500VAC 1500A@400VDC | 1055.900 | 0.300 | | x* | x** | | |
| .800 | 0.8 | 500 | 400 | | 430.000 | 0.909 | | x* | x** | | |
| 001. | 1 | 500 | 400 | | 139.400 | 1.800 | x | x* | x** | | x |
| 002. | 2 | 500 | 400 | | 55.200 | 9.120 | x | x* | x** | | |
| 3.15 | 3.15 | 500 | 400 | | 27.700 | 50.109 | x | x* | x** | | x |
| 004. | 4 | 500 | 400 | 100A@500VAC 500A@400VDC | 17.200 | 52.480 | x | x* | x** | | |
| 005. | 5 | 500 | 400 | | 13.700 | 76.500 | x | x* | x** | | |
| 06.3 | 6.3 | 500 | 400 | | 10.970 | 121.451 | x | x | x** | | |
| 008. | 8 | 500 | 400 | | 8.305 | 203.520 | x | x | x** | | |
| 010. | 10 | 500 | 400 | | 4.950 | 509.000 | x | x | | x | |
| 012. | 12 | 500 | 400 | | 4.730 | 576.000 | x | x | | x | |
| 016. | 16 | 500 | 400 | 100A@500VAC 400A@400VDC | 3.100 | 1331.200 | x | x | | x*** | |

*100A @ 600Vac also available. Add suffix "MXE6P". Example: 0477004.MXE6P.
**Semko approval for 100A@500Vac and 200A@400Vdc.
***100A@ 500Vac and 300A@400Vdc for 16A
†$I^2t$ test at 10x rated current.

## Temperature Re-rating Curve




## Average Time Current Curves



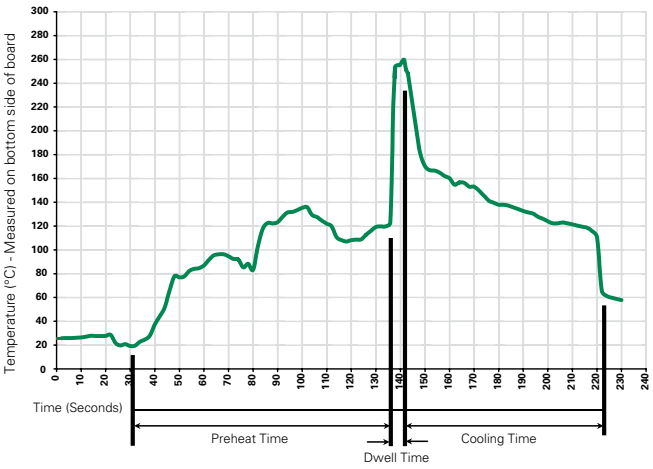



Revised: 09/05/18

# Axial Lead & Cartridge Fuses

## 5×20 mm > Time-Lag > 477 Series

## Soldering Parameters - Wave Soldering




**Recommended Process Parameters:**

| Wave Parameter | Lead-Free Recommendation |
|---|---|
| Preheat: (Depends on Flux Activation Temperature) | (Typical Industry Recommendation) |
| Temperature Minimum: | 100°C |
| Temperature Maximum: | 150°C |
| Preheat Time: | 60-180 seconds |
| Solder Pot Temperature: | 260°C Maximum |
| Solder Dwell Time: | 2-5 seconds |

**Recommended Hand-Solder Parameters:**

Solder Iron Temperature: 350°C +/- 5°C
Heating Time: 5 seconds max.

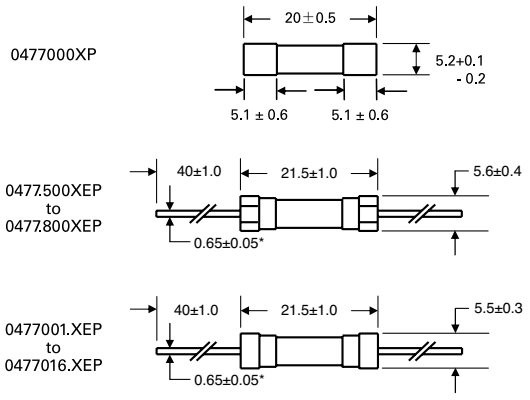
**Note: These devices are not recommended for IR or Convection Reflow process.**

## Product Characteristics

| | |
|---|---|
| **Materials** | **Body:** Ceramic<br>**Cap:** Nickel–plated Brass<br>**Leads:** Tin–plated Copper |
| **Terminal Strength** | MIL-STD-202, Method 211, Test Condition A |
| **Solderability** | MIL-STD-202 Method 208 |
| **Product Marking** | **Cap 1:** Brand logo, current and voltage ratings<br>**Cap 2:** Series and agency approval markings |
| **Packaging** | Available in Bulk (M=1000 pcs/pkg) |

| | |
|---|---|
| **Operating Temperature** | –55°C to +125°C |
| **Thermal Shock** | MIL-STD-202, Method 107, Test Condition B (5 cycles, –65°C to +125°C) |
| **Vibration** | MIL-STD-202, Method 201 |
| **Humidity** | MIL-STD-202, Method 103, Test Condition A (High RH (95%) and elevated temp (40°C) for 240 hours) |
| **Salt Spray** | MIL-STD-202, Method 101, Test Condition B |

## Dimensions




All dimensions in mm

Notes:
* Ratings above 5A 1.0±0.05 diameter lead.

## Part Numbering System

**0477 xxxx M X E P**

**Series**

**Amp Code**
Refer to Amp Code column of Electrical Characteristics Table

**Quantity Code**
M = 1000

**Packaging Code**
X = Filler

**Option Codes**
E : Axial Lead
Others : special options.
Please call
Littelfuse for detail.

**Lead-Free**


Revised: 09/05/18

## Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Reel Size |
|---|---|---|---|---|
| **477 Series** | | | | |
| Bulk | N/A | 1000 | MX | N/A |
| Bulk | N/A | 1000 | MXE | N/A |
| Reel and Tape | N/A | 1000 | MRET1 | T1=53mm (2.087") |