

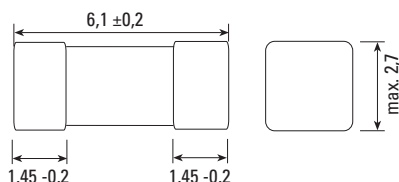
# SMQ / No. 419

## UL 248-14, 125V, F

## Specifications

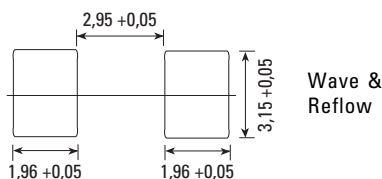


### Dimensions (mm)



Pad Size 2410

### Pad Layout



Wave & Reflow

### Time-Current Characteristic

Quick Acting (F)

### Standard

UL 248-14  
CSA C22.2 No. 248.14

### Approvals

cULus Listed: File No. E 67006  
cULus Recognized: File No. E 67006

### Features

Heat resistant ceramic housing  
For line or low voltage applications  
Low voltage drop  
Internationally approved

### WebLinks

#### Data Sheet - latest version

[www.wickmannusa.com/products/419.pdf](http://www.wickmannusa.com/products/419.pdf)

#### Approval Certificates

[www.wickmannusa.com/approvals](http://www.wickmannusa.com/approvals)

#### Time-Current Curve

[www.wickmannusa.com/itcurves](http://www.wickmannusa.com/itcurves)

#### Packaging

[www.wickmannusa.com/pack](http://www.wickmannusa.com/pack)

#### For Application Information refer to

[www.wickmannusa.com/download/fuseology.pdf](http://www.wickmannusa.com/download/fuseology.pdf)

### Packaging Code and Info

000: Blister Tape/Ø180mm Reel (1000 pcs.)  
010: Blister Tape (5000 pcs.) contact WICKMANN

### Materials

Housing: Ceramic  
Element: Wire  
Terminals: Copper alloy, tin plated

### Operating Temperature

-65°C to +125°C (consider de-rating)

### Climatic Category

-40°C/+85°C/21 days (IEC 60068-2-1...3)

### Stock Conditions

+10°C to +60°C  
relative humidity ≤ 75% yearly average,  
without dew, maximum value for 30 days-95%

### Vibration Resistance

24 cycles at 15 min. each (IEC 60068-2-6)  
10 - 60Hz at 0.75mm amplitude  
60 - 2000Hz at 10g acceleration

### Solderability

235°C, 3 sec. (IEC 60068-2-58)

### Soldering Heat Resistance

260°C, 10 sec. (IEC 60068-2-58)

### Minimum Cross Section, Copper

Conducting path - 0.1mm<sup>2</sup>  
Path thickness - 0.035mm

### Mounting

Avoid circuit traces below the fuse


### Marking

F, Current Rating

### Unit Weight




0.23g (approx.)

### Limits for Pre-arcing Time

|                 |                          |  |
|-----------------|--------------------------|--|
| Rated Current   | 2.0 x I <sub>Rated</sub> | 2.0 x I <sub>Rated</sub>  |
| 62mA ... 10.00A | < 60s                    | < 5s   |



### Permissible continuous operating current is ≤ 70% at ambient temperature of 23°C (73.4°F).

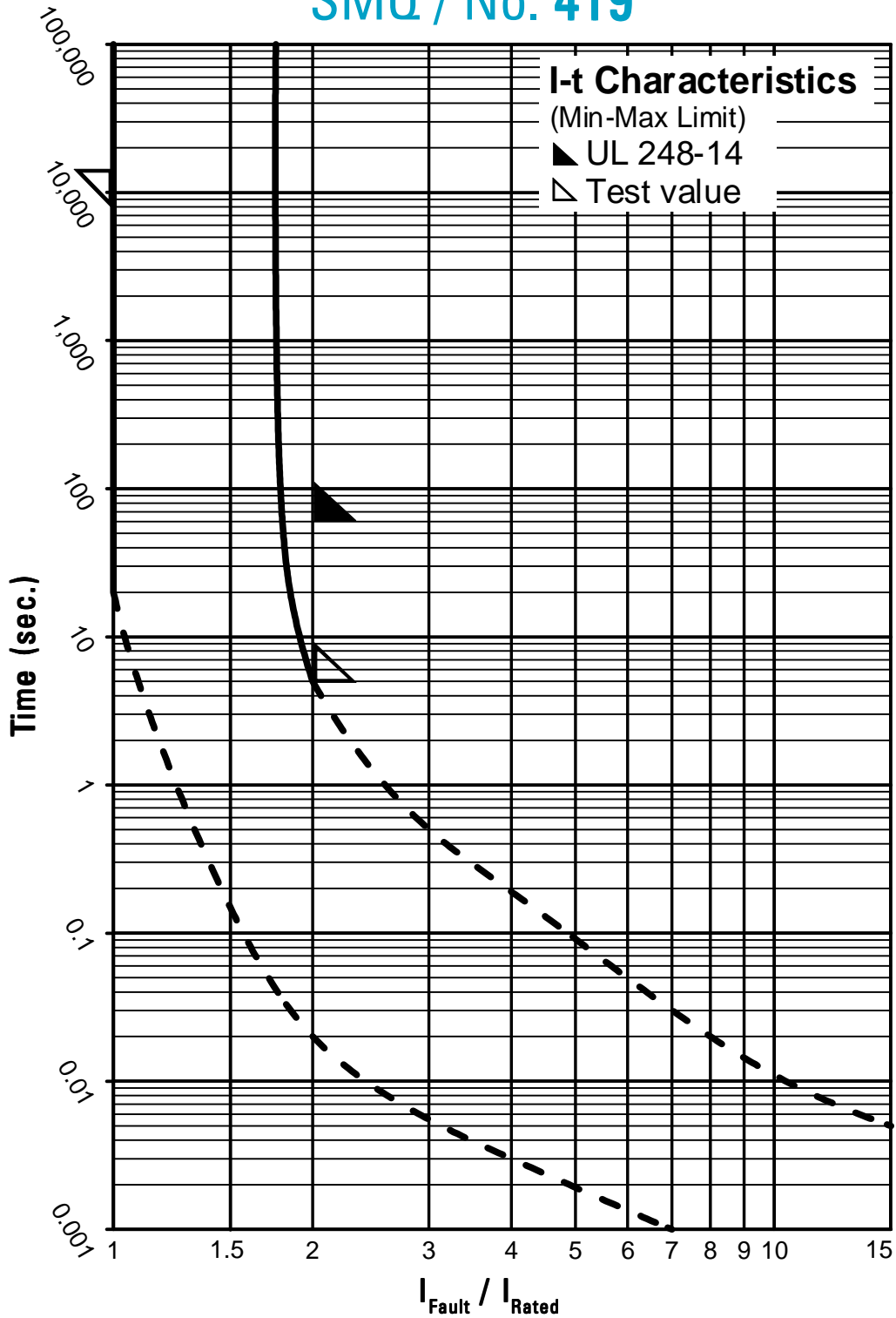
| Rated Current | Amp Code | Voltage Rating | Breaking Capacity                         | Voltage Drop<br>1.0 x I <sub>Rated</sub> <br>typ. (mV) | Power Dissipation<br>1.0 x I <sub>Rated</sub> <br>typ. (mW) | Melting Integral<br>10 x I <sub>Rated</sub>  |                         | Approvals |       |
|---------------|----------|----------------|---|--|---|--|-------------------------|-----------|-------|
|               |          |                |   |  |   | max. (A <sup>2</sup> s)  | typ. (A <sup>2</sup> s) | cULus     | cURus |
| 62mA          | 0062     | 125V           |   | 1600   | 85  | 0.00014  | 0.000095                | •         |       |
| 125mA         | 0125     | 125V           |   | 1300   | 120   | 0.00085  | 0.00067                 | •         |       |
| 250mA         | 0250     | 125V           |   | 950  | 150   | 0.0065   | 0.0052                  | •         |       |
| 500mA         | 0500     | 125V           |   | 360  | 200   | 0.093  | 0.074                   | •         |       |
| 750mA         | 0750     | 125V           |   | 350  | 300   | 0.25   | 0.20                    | •         |       |
| 1.00A         | 1100     | 125V           | 50A / 125VAC/DC<br>50-60Hz<br>cos φ = 1.0 | 210  | 230   | 0.50   | 0.42                    | •         |       |
| 1.50A         | 1150     | 125V           |   | 250  | 500   | 1.1  | 0.95                    | •         |       |
| 2.00A         | 1200     | 125V           |   | 180  | 400   | 1.1  | 0.90                    | •         |       |
| 2.50A         | 1250     | 125V           |   | 220  | 550   | 1.2  | 0.95                    | •         |       |
| 3.00A         | 1300     | 125V           |   | 160  | 600   | 2.0  | 1.7                     | •         |       |
| 4.00A         | 1400     | 125V           |   | 140  | 670   | 4.3  | 3.42                    | •         |       |
| 5.00A         | 1500     | 125V           |   | 130  | 750   | 7.5  | 6.8                     | •         |       |
| 7.00A         | 1700     | 125V           | 35A / 125VAC                              | 130  | 1200  | 13.6   | 11.6                    | •         | •     |
| 8.00A         | 1800     | 125V           | 50-60Hz; cos φ = 1.0                      | 110  | 1300  | 17.5   | 13.8                    | •         | •     |
| 10.00A        | 2100     | 125V           | 100A / 125VDC                             | 100  | 1400  | 27   | 23.5                    | •         | •     |

### Order Information

| Qty. | Order-Number | Series | Amp Code | Pack. Code |
|------|--------------|--------|----------|------------|
|      |              | 419    |          |            |

Specifications are subject to change without notice.

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Contact WICKMANN for individual I-t curves