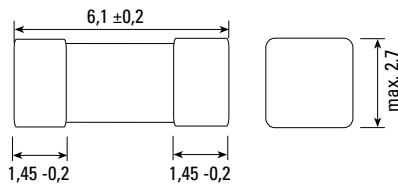


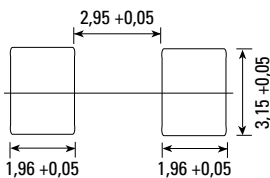
## SMQ / No. 419



## Dimensions (mm)



## Pad Layout



## UL 248-14, 125V, F

## Time-Current Characteristic

Quick Acting (F)

## Standard

UL 248-14  
CSA C22.2 No. 248.14

## Approvals (pending)

cULus Recognized: File No. E 67006

## Features

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

## WebLinks

## Data Sheet

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

## Approval Certificates

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

## Time-Current Curve

Page 70  
[www.wickmann.com/itcurves](http://www.wickmann.com/itcurves)

## Packaging

Page 118  
[www.wickmann.com/pack](http://www.wickmann.com/pack)

## FaxBack Document # 328

## Specifications

## Packaging

000: Blister Tape (1000 pcs.)

## Materials

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

## Operating Temperature

-40°C to +85°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

Solder the fuse with the marked side facing up  
Avoid circuit traces below the fuse

## Marking

 , F, Current Rating

## Unit Weight

0.23g (approx.)

## Limits for Pre-arcing Time

| Rated Current    | $2.0 \times I_{\text{Rated}}$ | $2.0 \times I_{\text{Rated}}$  |
|------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 250mA ... 10.00A | < 60s                         | < 5s                                                                                                              |



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

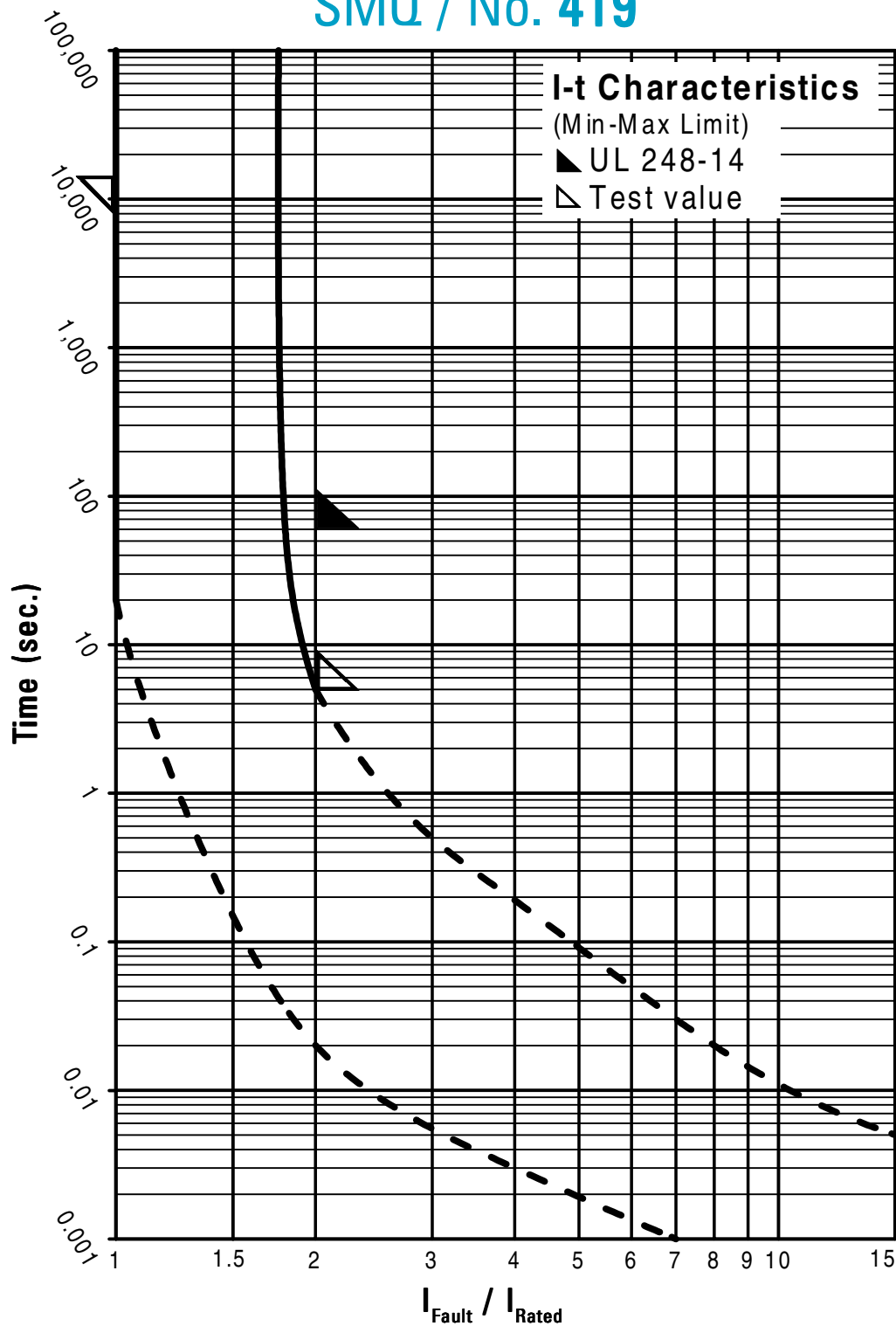
| Rated Current | Amp Code | Voltage Rating | Breaking Capacity | Voltage Drop<br>$1.0 \times I_{\text{Rated}}$<br>typ. (mV) | Power Dissipation<br>$1.0 \times I_{\text{Rated}}$<br>typ. (mW) | Melting Integral<br>$10 \times I_{\text{Rated}}$<br>max. (A <sup>2</sup> s) | Integral<br>typ. (A <sup>2</sup> s) | Approvals<br>cUL cULus |
|---------------|----------|----------------|-------------------|------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------|------------------------|
| 250mA         | 0250     | 125V           |                   | -                                                          | -                                                               | -                                                                           | -                                   |                        |
| 500mA         | 0500     | 125V           |                   | -                                                          | -                                                               | -                                                                           | -                                   |                        |
| 750mA         | 0750     | 125V           |                   | 360                                                        | 300                                                             | 0.27                                                                        | 0.22                                | P                      |
| 1.00A         | 1100     | 125V           | 50A / 125VAC/DC   | 210                                                        | 230                                                             | 0.50                                                                        | 0.42                                | P                      |
| 1.50A         | 1150     | 125V           | 50-60Hz           | 200                                                        | 370                                                             | 1.10                                                                        | 0.89                                | P                      |
| 2.00A         | 1200     | 125V           | cos φ = 1.0       | 180                                                        | 400                                                             | 1.10                                                                        | 0.90                                | P                      |
| 2.50A         | 1250     | 125V           |                   | 220                                                        | 550                                                             | 1.20                                                                        | 0.95                                | P                      |
| 3.00A         | 1300     | 125V           |                   | 160                                                        | 600                                                             | 2.00                                                                        | 1.70                                | P                      |
| 4.00A         | 1400     | 125V           |                   | 140                                                        | 670                                                             | 4.30                                                                        | 3.42                                | P                      |
| 5.00A         | 1500     | 125V           | 35A AC / 50A DC~  | 130                                                        | 750                                                             | 7.50                                                                        | 6.80                                | P                      |
| 7.00A         | 1700     | 125V           |                   | 130                                                        | 1200                                                            | 13.60                                                                       | 11.60                               | P                      |
| 8.00 A        | 1800     | 125V           | 35A / 125VAC/DC   | 95                                                         | 800                                                             | 20.00                                                                       | 17.00                               | P                      |
| 10.00A        | 2100     | 125V           |                   | 100                                                        | 1400                                                            | 27.00                                                                       | 23.50                               | P                      |

P Pending

## Order Information

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

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Contact WICKMANN for individual I-t curves