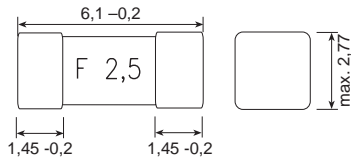


## No. 419 SM

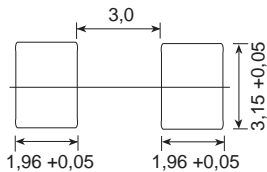
This product is not recommended for new designs. Please refer to Littelfuse No. 451.



### Dimensions (mm)



### Pad Layout



## UL 248-14, 125 V, F

### Time-Current Characteristic

Quick Acting (F)

### Standard

UL 248-14  
CSA C22.2 No. 248.14

### Approvals

cULus Recognized  
cULus Listed

### Features

Heat resistant ceramic housing  
For line or low voltage applications  
Low voltage drop  
Internationally approved  
Also available as holder system 424 with mounted fuse 419

### WebLinks

#### Further info see:

[www.wickmanngroup.com](http://www.wickmanngroup.com)

#### Further application infos see Fuseology:

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

## Specifications

### Packaging

000: Blister tape 18 cm reel (1000 pcs.)  
001: Blister tape 33 cm reel (5000 pcs.)  
Tape width 12 mm

### Materials

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

### Operating Temperature

-65 °C to +125 °C (consider de-rating)

### Climatic Category

-65 °C/+125 °C/21 days  
(IEC 60068-1,-2-1,-2-2,-2-78)

### 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 - 60 Hz at 0.75 mm amplitude  
60 - 2000 Hz at 10 g acceleration

### Solderability

235 °C, 2 s (IEC 60068-2-58)

### Soldering Heat Resistance

260 °C, 10 s (IEC 60068-2-58)

### Minimum Cross Section, Copper

up to 5 A Conducting path - min 0.175 mm<sup>2</sup>  
Path thickness - min 35 µm  
from 7 A on Conducting path - min 0.35 mm<sup>2</sup>  
Path thickness - min 70 µm

### Mounting

Avoid circuit traces below the fuse

### Marking

F, Current Rating

### Unit Weight

0.23 g (approx.)

### Limits for Pre-arcing Time

Rated Current	1.0 x I <sub>N</sub>	2.0 x I <sub>N</sub>
62 mA ... 10.00 A	> 2 h	< 5 s
12.00 A ... 15.00 A	> 2 h	< 30 s



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

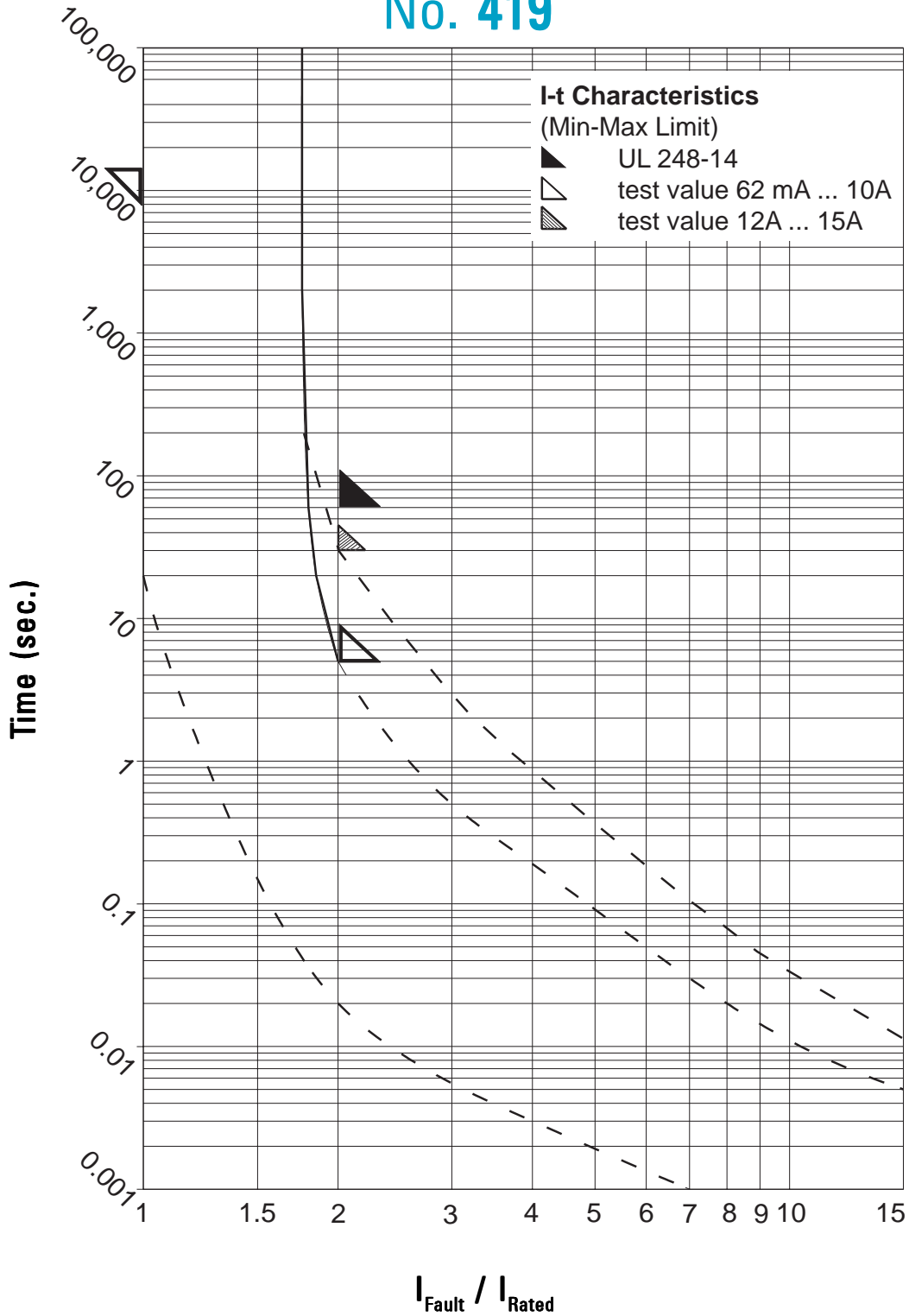
Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>N</sub> typ. (mV)	Power Dissipation 1.0 x I <sub>N</sub> typ. (mW)	Melting Integral		Approvals	
						max. (A <sup>2</sup> s)	10 x I <sub>N</sub> typ. (A <sup>2</sup> s)	cULus	cURus
62mA	0062	125V		1600	85	0.00014	0.000095	•	
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	50 A / 125 V AC/DC	350	300	0.25	0.20	•	
1.00A	1100	125V	50-60 Hz	210	230	0.50	0.42	•	
1.50A	1150	125V	cos φ = 1.0	250	500	1.10	0.95	•	
2.00A	1200	125V		180	400	1.10	0.90	•	
2.50A	1250	125V		220	550	1.20	0.95	•	
3.00A	1300	125V		160	600	2.00	1.70	•	
4.00A	1400	125V		140	670	4.30	3.42	•	
5.00A	1500	125V		130	750	7.50	6.80	•	
7.00A	1700	125V	35 A / 125 V AC	130	1200	13.60	11.60	•	•
8.00 A	1800	125V	50-60 Hz	110	1300	17.50	13.80	•	•
10.00A	2100	125V	cos φ = 1.0	100	1400	27.00	23.50	•	•
			100 A / 125 V DC						
			50 A / 65 V AC/DC						
12.00A	2120	65V	50-60 Hz	70	1100	65.00	52.0	•	•
15.00A	2150	65V	cos φ = 1.0	58	1200	125.00	103.00	•	•

### Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		419		

Specifications are subject to change without notice

# No. 419



Contact WICKMANN for individual I-t curves