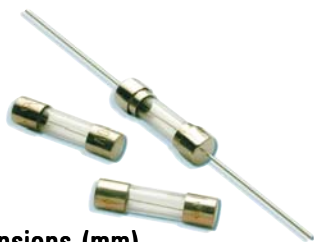


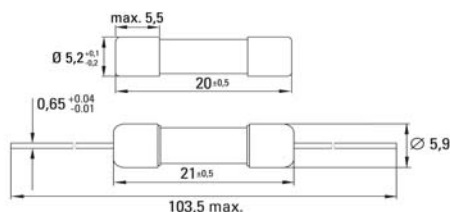
## 5x20mm / No. 199

formerly No. 196/S

This product is not recommended for new designs. Please refer to Littelfuse No. 219XA.



### Dimensions (mm)



Optional Holders\*

## IEC 60127-2/VI, 250 V, T

### lead free

#### Time-Current Characteristic

Time Lag (T)

#### Standard

IEC 60127-2/VI

#### Approvals

VDE  
Semko  
CCC  
cULus Recognized  
METI-PSE

### Features

Very high surge tolerance  
Enhanced breaking capacity  
Visual fault indication  
Direct solderable or plug-in versions  
Internationally approved  
Worldwide availability

### WebLinks

#### Further info see:

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

#### Further application info see fuseology:

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

## Specifications

#### Packaging

000: Bulk (1000 pcs.)  
043: With mounted holder - Tape/Reel (1250 pcs.) on request\*  
\*approvals pending for Pb-free fuse with holders

#### Materials

Tube: Glass  
End Caps: Nickel-plated brass  
Optional Holders: Nickel-plated caps  
Tin-plated copper wires

#### Operating Temperature

-40 °C to +85 °C (consider de-rating)

#### Climatic Category

-40 °C/+85 °C/21 days  
(IEC 60068-1,-2-1,-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 (EN 60068-6)  
10 - 60Hz at 0.75 mm amplitude  
60 - 2000 Hz at 10 g acceleration

#### Solderability (optional holders)

260 °C, ≤ 3 s (Wave)  
350 °C, ≤ 1 s (Soldering Iron)

#### Soldering Heat Resistance (optional holders)

260 °C, 10 s (IEC 60068-2-20)

#### Marking

Ⓜ, T, Current Rating, E, 250V, Approvals

#### Unit Weight

1.1 g (approx.)  
2.1 g (with holders)



### Limits for Pre-arcing Time

Rated Current	1.5 x I <sub>N</sub>	2.1 x I <sub>N</sub>	2.75 x I <sub>N</sub>	4 x I <sub>N</sub>	10 x I <sub>N</sub>
800 mA ... 6.30 A	> 1 h	< 2 min	600 ms...10 s	150 ms...3 s	20 ms ... 300 ms



### Permissible continuous operating current is ≤ 100 % at ambient temperature of 23 °C (73.4 °F).

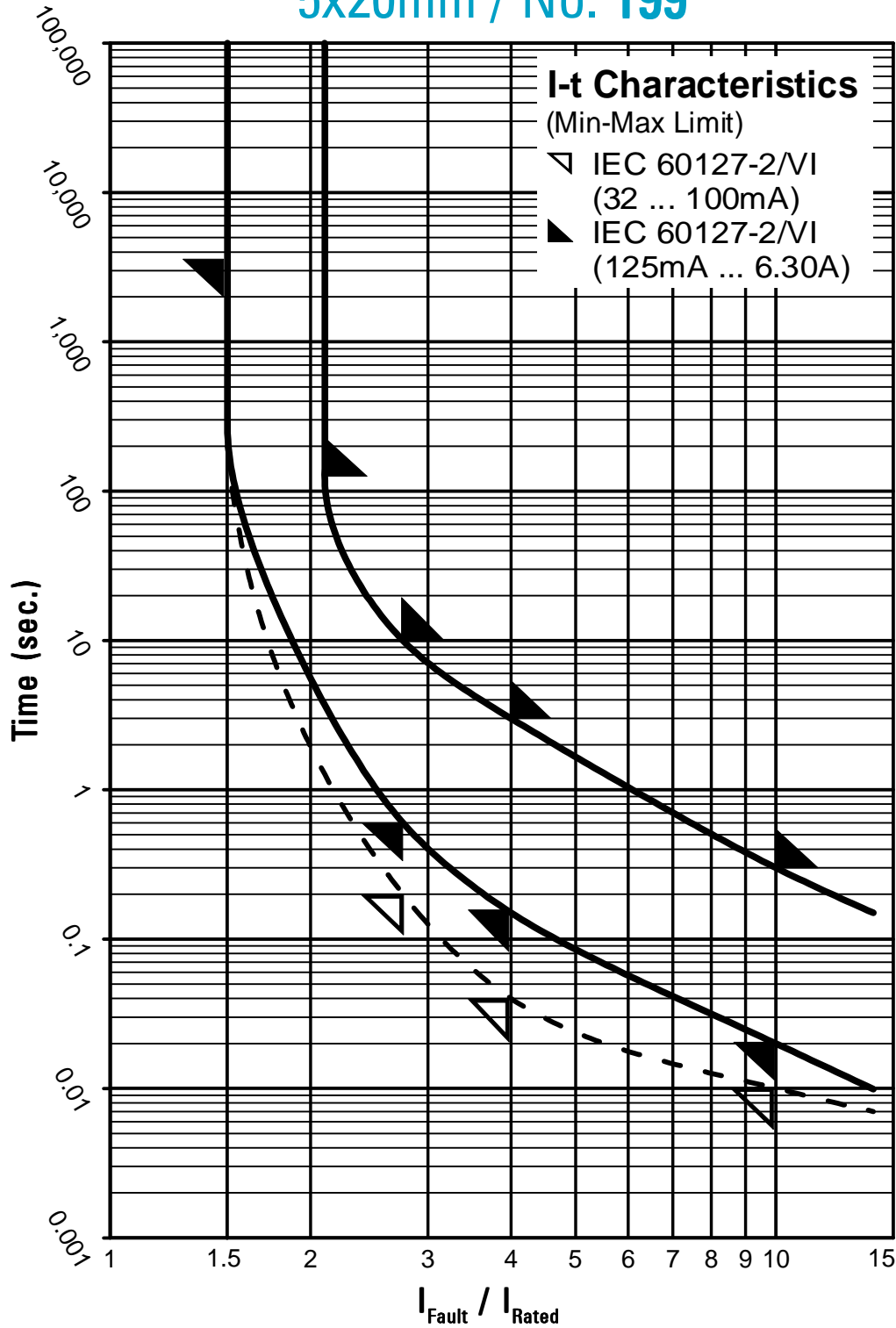
Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>N</sub> Ⓜ max. (mV)	Power Dissipation 1.5 x I <sub>N</sub> Ⓜ max. (W)	Melting Integral 10 x I <sub>N</sub> Ⓜ min. (A <sup>2</sup> s) typ.	Approvals	VDE	SEMKO	CCC	cULus	METI-PSE
800 mA	0800	250 V		180	0.370	12.9	17.2	•	•	•	•	•
1.00 A	1100	250 V		137	0.362	24.0	27.4	•	•	•	•	•
1.25 A	1125	250 V		145	0.560	39.0	45.7	•	•	•	•	•
1.60 A	1160	250 V		133	0.610	56.1	66.1	•	•	•	•	•
2.00 A	1200	250 V	150 A / 250 V AC 50-60 Hz cos φ = 1.0	120	0.707	80.9	95.2	•	•	•	•	•
2.50 A	1250	250 V		110	0.850	120	140	•	•	•	•	•
3.15 A	1315	250 V		100	0.900	235	277	•	•	•	•	•
4.00 A	1400	250 V		92	1.250	314	364	•	•	•	•	•
5.00 A	1500	250 V		80	1.500	240	288	•	•	•	•	•
6.30 A	1630	250 V		83	1.700	480	564	•	•	•	•	•

### Order Information

Qty.	Order-Number	Series	Amp Code	Pack. Code
		199		

Specifications are subject to change without notice.

## 5x20mm / No. 199



Contact WICKMANN for individual I-t curves