

# S501

## 5 mm x 20 mm Fast-acting ceramic tube fuses



**Product features**

- Fast-acting high breaking capacity
- Optional axial leads available
- 5 mm x 20 mm physical size
- Ceramic tube with silver-plated (50 mA-400 mA) and nickel-plated (500 mA-10 A) endcaps.
- Designed to IEC 60127-2

**Agency information**

- cURus: File E19180, Guide JDYX2, JDYX8
- CSA Component Acceptance: File 53787
- SEMKO Approval: File 413779
- VDE Approval: File 40015517
- IMQ Approval: File EB405
- CCC Approval: File 2005010207155691
- BSI Approval: File KM55676

**Ordering information**

- Specify packaging, product and option code
- Ratings above 6.3 A have a 0.8 mm diameter lead
- With TR2 packaging code, lead wire length is 19.05 mm

Electrical Characteristics							
$I_n$	1.5 $I_n$ min	2.1 $I_n$ max	2.75 $I_n$		4 $I_n$		10 $I_n$
			min	max	min	max	max
50mA-4A	60 min	30 min	10 ms	2 sec	3 ms	300 ms	20 ms
5A-6.3A	60 min	30 min	10 ms	3 sec	3 ms	300 ms	20 ms
8A-10A	30 min	30 min	40 ms	20 sec	10 ms	1s	30 ms

Specifications												
Product Code	Voltage Rating Vac	Interrupting Rating at Rated Voltage (50Hz) Vac	Typical DC Cold Resistance ( $\Omega$ )*	Typical Melting $I^{2t}$ (amps)	Typical Voltage Drop (mV)†	Agency Approvals						
						IMQ	VDE	BSI	SEMKO	cURus	CCC	MITI/JET
S501-50-R	250	1500	157.5	0.0017	9000	X	X	X	X	X	X	X
S501-63-R	250	1500	39.0	0.0005	3300					X	X	X
S501-80-R	250	1500	27.9	0.0011	2600					X		X
S501-100-R	250	1500	20.0	0.0018	2300					X		X
S501-125-R	250	1500	12.3	0.0037	1900					X		X
S501-160-R	250	1500	8.5	0.008	1600	X	X	X	X	X	X	X
S501-200-R	250	1500	6.0	0.02	1350	X	X	X	X	X	X	X
S501-250-R	250	1500	4.4	0.027	1300	X	X	X	X	X	X	X
S501-315-R	250	1500	3.3	0.01	1400	X	X	X	X	X	X	X
S501-400-R	250	1500	2.2	0.018	1200					X		X
S501-500-R	250	1500	0.460	0.038	1050	X	X	X	X	X	X	X
S501-630-R	250	1500	0.340	0.064	1200					X		X
S501-800-R	250	1500	0.245	0.097	490	X	X	X	X	X	X	X
S501-1-R	250	1500	0.231	0.146**	330		X		X	X	X	
S501-1.25-R	250	1500	0.176	0.313**	297				X	X	X	
S501-1.6-R	250	1500	0.113	0.748**	239		X		X	X	X	
S501-2-R	250	1500	0.073	2.0	205	X	X	X	X	X	X	X‡
S501-2.5-R	250	1500	0.053	3.9	190	X	X	X	X	X	X	X‡
S501-3.15-R	250	1500	0.037	8.1	160	X	X	X	X	X	X	X‡
S501-4-R	250	1500	0.027	14	160	X	X	X	X	X	X	X‡
S501-5-R	250	1500	0.019	25	155	X	X	X	X	X	X	X‡
S501-6.3-R	250	1500	0.014	48	150	X	X	X	X	X	X	X
S501-8-R	250	1500	0.009	104	102	X	X	X	X	X		X
S501-10-R	250	1500	0.008	155	111	X	X	X	X	X		X

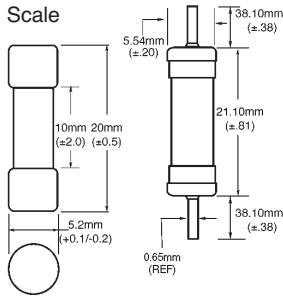
\* DC Cold Resistance (measured at <10% of rated current)

\*\*  $I^2t$  of 1A, 1.25A & 1.6A is measured at 10I<sub>n</sub> DC

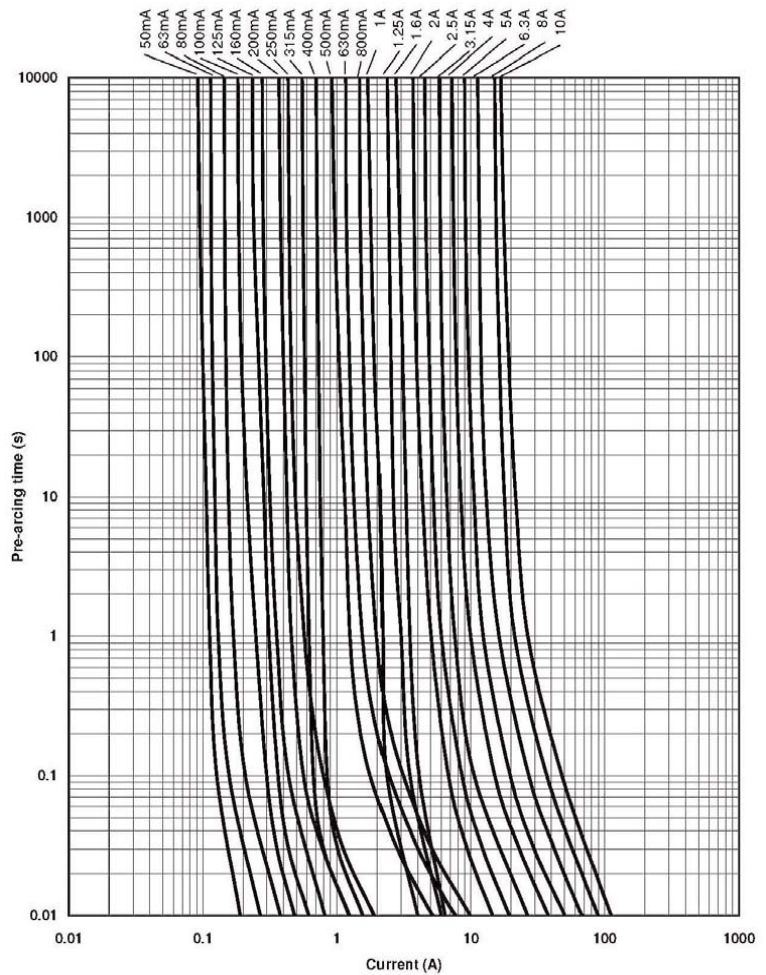
† Typical Voltage Drop (voltage drop was measured at 20°C ambient temperature at rated current)

‡ CSA approvals on these ratings will not be marked on the fuse cap

**Dimensions - mm**  
Drawing Not to Scale



**Time - Current Curve**



Packaging Code	
Packaging Code	Description
BK	100 fuses packed into a cardboard carton
BK1	1000 fuses packed into a poly bag
TR2	1500 fuses packed into tape on a reel (19.05 mm lead wire length)

Option Code	
Option Code	Description
V	Axial leads - copper tinned wire with nickel-plated brass endcaps

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

**Eaton**  
**Electronics Division**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
[www.eaton.com/electronics](http://www.eaton.com/electronics)

© 2017 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 2051 BU-SB11296  
June 2017

Eaton is a registered trademark.

All other trademarks are property of their respective owners.