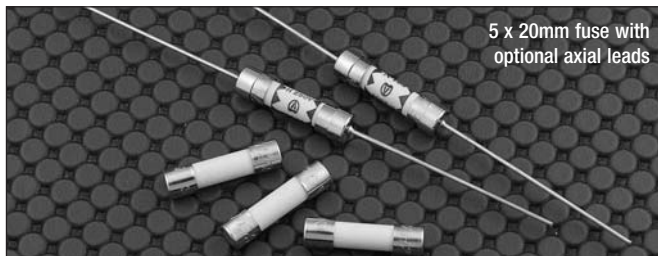


# 5 x 20mm Time-Delay, Ceramic Tube Fuses S505 Series



### Description

- Time-delay, high breaking capacity
- Available with optional axial leads
- Ceramic tube, silver-plated endcap construction (500mA-800mA), nickel-plated brass endcap construction (1-12A)
- Optional sleeve is flexible flouropolymer (UL flammability rating VW-1). Consult factory for details.
- 5 x 20mm physical size
- Designed to IEC 60127-2 (500mA-10A) & extension 12A

Electrical Characteristics										
Amps	1.5I <sub>n</sub>		2.1I <sub>n</sub>		2.75I <sub>n</sub>		4I <sub>n</sub>		10I <sub>n</sub>	
	Min min.	Max min.	Min ms	Max s	Min ms	Max s	Min ms	Max ms	Min ms	Max ms
<1A	60	30	250	80s	50	5s	5	150		
1A-3.15A	60	30	750	80s	95	5s	10	150		
4A-6.3A	60	30	750	80s	150	5s	10	150		
8A-12A	30	30	750	80s	150	5s	10	150		

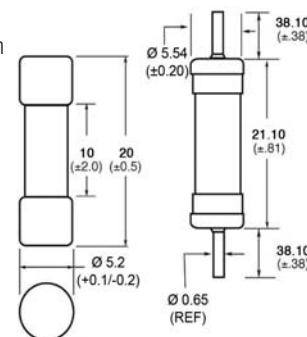
### Specifications

Product Code	Voltage Rating AC	Interrupting Rating at Rated Voltage (50Hz) AC <sup>1</sup>	Typical DC Cold Resistance (Ω) <sup>2</sup>	Typical Pre-arcing I <sup>2</sup> t (A <sup>2</sup> s)/AC <sup>3</sup>	Typical Voltage Drop (mV) <sup>4</sup>	Agency Information								
						IMQ <sup>5</sup>	VDE	SEMKO	cURus	CCC/CQC <sup>6</sup>	PSE/JET	CSA <sup>5</sup>	KC <sup>5</sup>	BSI
S505-500-R	250	1500	0.5070	0.188 <sup>x</sup>	295	X	X	X	X	X		X		X
S505-800-R	250	1500	0.2370	0.632 <sup>x</sup>	189	X	X	X	X	X		X		X
S505-1-R	250	1500	0.1401	1.28	152.5	X	X	X	X	X	X	X	X	X
S505-1.25-R	250	1500	0.1075	2.22	150	X	X	X	X	X	X	X	X	X
S505-1.6-R	250	1500	0.0700	6.78	125	X	X	X	X	X	X	X	X	X
S505-2-R	250	1500	0.0545	9.60	118.5	X	X	X	X	X	X	X	X	X
S505-2.5-R	250	1500	0.0395	16.60	115	X	X	X	X	X	X	X	X	X
S505-3.15-R	250	1500	0.0305	36.60	102.5	X	X	X	X	X	X	X	X	X
S505-4-R	250	1500	0.0185	38.45 <sup>x</sup>	86.5	X	X	X	X	X	X	X	X	X
S505-5-R	250	1500	0.0131	71.30 <sup>x</sup>	77.5	X	X	X	X	X	X	X	X	X
S505-6.3-R	250	1500	0.0102	111 <sup>x</sup>	75	X	X	X	X	X	X	X	X	X
S505-8-R	250	1500	0.0077	228 <sup>x</sup>	73	X	X	X	X	X <sup>6</sup>	X	X	X	X
S505-10-R	250	1500	0.0061	397	72	X	X	X	X	X <sup>6</sup>	X	X	X	X
S505-12-R	250	1000	0.0053	713.7 <sup>x</sup>	77		X		X					

1. Interrupting ratings: 500mA to 10A were measured at 70% to 80% PF on AC, 12A was measured at 100% PF on AC.  
 2. Typical DC Cold Resistance (measured at <10% of rated current).  
 3. Typical Pre-Arching I<sup>2</sup>t (measured at listed interrupting rating and rated voltage if not specified); With "X" specified, the typical I<sup>2</sup>t value is measured at 10 times of rated current under DC.

### Dimensions - mm

- Ratings above 6.3A have a maximum 0.81mm diameter lead
- With TR2 packaging code, leadwire length is 19.05mm



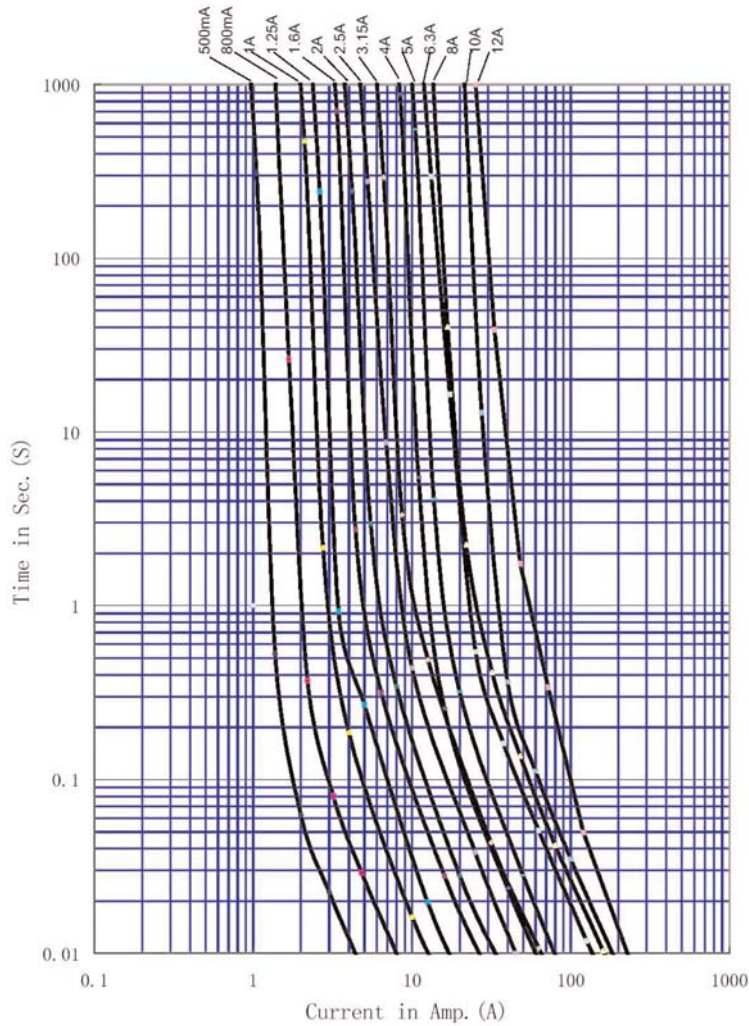
### Agency Information

- UL Recognized Card: Guide JDYX2, File E19180, JDYX8, File E19180
- CSA Component Acceptance: File 53787
- SEMKO: File 816547, 1119019
- VDE: File 40014091, 40024352, 40023140
- BSI: File KM55676
- IMQ: File CA03.00100 and CA03.00529
- PES+JET: File 1641-31003-1009, 1641-31003-1010, 1641-31003-1011, 1641-31003-1012, 1641-31003-2001, 1641-31003-2002
- CCC: File 2002010207011295, CQC11012061930
- KC-Mark: File SU05011-4012A, SU05011-5004A

### Ordering

- Specify packaging code (insert packaging code prefix before part number) e.g., BK- (or BK1-/TR2-) S505-1-R
- Specify option codes if desired (for axial leads, insert "V" between catalog series and amp rating) e.g., BK-S505-V-1-R

### Time-Current Curves



Packaging Code	
Packaging Code Prefix	Description
BK-	100 fuses packed into a cardboard carton
BK1-	1000 fuses packed into a poly bag
TR2-	1500 fuses on tape and reel (19.05mm leadwire length)
Option Code	
Option Code	Description
-V	Axial leads – copper tinned wire with nickel-plated brass endcaps

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann 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.