# **Bussmann**

## 5 x 20mm Fuses

# S505 Series, Time-Delay, Ceramic Tube

#### **Description**

- Time-delay, high breaking capacity
- · Optional axial leads available
- 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)
- 5 x 20mm physical size
- Designed to IEC 60127-2 (500mA-10A) & extension 12A

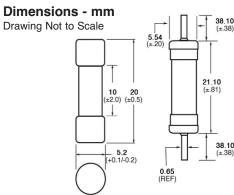
Electrical Characteristics									
	1.5 ln	2.1 ln	2.75 ln		4 In		10 ln		
In	min	max	min	max	min	max	min	max	
<1A	60 min	30 min	250 ms	80s	50 ms	5s	5 ms	150 ms	
1A-3.15A	60 min	30 min	750ms	80s	95 ms	5s	10 ms	150 ms	
4A-6.3A	60 min	30 min	750ms	80s	150 ms	5s	10 ms	150 ms	
8A-12A	30 min	30 min	750ms	80s	150 ms	5s	10 ms	150 ms	

### **Agency Information**

- UL Recognized Card: Guide JDYX2, File E19180
- CSA Component Acceptance: File 53787
- SEMKO: File 500496, 816547
- VDE: File 40014091, 40024352, 40023140
- BSI: File KM55676
- IMQ: File 00100, 00529
- PES+JET: File 1641-31003-1004,1641-31003-1011
- · CCC: File 2002010207011295
- EK: File SU05011-4012A, SU0511-5014A
- FIMKO: File FI21555







- Ratings above 4A have a maximum 0.81mm diameter lead
- · With TR2 packaging code, lead wire length is 19.05mm

### **Ordering**

- · Specify packaging code
  - Insert packaging code prefix before part number.
    E.g. BK (or BK1)/S505-1-R

Data Sheet 2037

- · Specify option codes if desired
  - For axial leads, insert "V" between catalog series and amp rating. E.g., BK/S505-V-1-R

Specifications														
	Voltage	Interrupting Rating (amps)	Typical DC Cold	Typical	Typical Voltage									
Part	Rating	@ Rated	Resistance	Pre-arching	Drop	Agency Approvals								
Number	Vac	Vac (50Hz)*	(Ω)**	I²t AC***	(mV)‡	IMQ	VDE	SEMKO	UL	CCC	PSEJET	CSA	EK	BSI
S505-500-R	250	1500	0.5070	0.188†	295	Χ	Χ	Χ	Χ	Χ		Χ		Χ
S505-800-R	250	1500	0.2370	0.632†	189	X	Χ	Χ	Χ	Χ		Χ		Χ
S505-1-R	250	1500	0.1401	1.28	152.5	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-1.25-R	250	1500	0.1075	2.22	150	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-1.6-R	250	1500	0.0700	6.78	125	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-2-R	250	1500	0.0545	9.60	118.5	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-2.5-R	250	1500	0.0395	16.60	115	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ
S505-3.15-R	250	1500	0.0305	36.60	102.5	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ
S505-4-R	250	1500	0.0185	38.45†	86.5	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ
S505-5-R	250	1500	0.0131	71.30†	77.5	Х	Χ	Χ	Χ	X	Χ	Χ	Х	Х
S505-6.3-R	250	1500	0.0033	197	75	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-8-R	250	1500	0.0067	311	75	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ
S505-10-R	250	1500	0.0061	397	72	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ
S505-12-R	250	1000	0.0053	713.7†	77		Χ		Χ					

 $<sup>^{\</sup>star}$  Interrupting ratings (500mA to 10A were measured at 70% to 80% PF on.

COOPER Bussmann

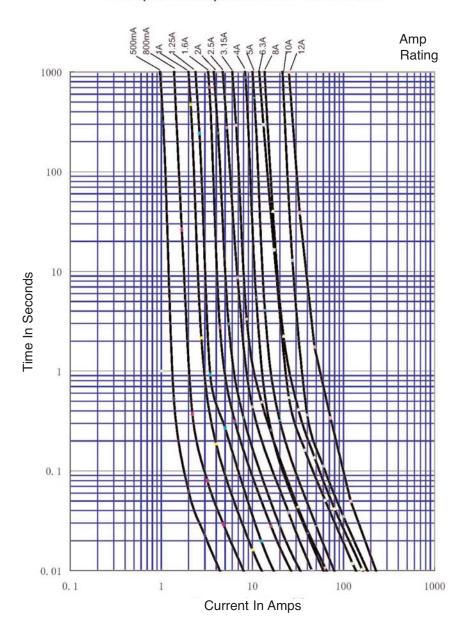
0409 BU-SB08329 Page 1 of 2

<sup>\*\*</sup> Typical DC Cold Resistance (Measured At <10% of rated current).

<sup>\*\*\*</sup> Typical Pre-Arching I<sup>2</sup>t (Measured at listed interrupting rating and rated voltage if not specified).

<sup>†</sup> The typical I<sup>2</sup>t value was measured at 10 times of rated current under DC.

<sup>‡</sup> Typical Voltage Drop (voltage drop was measured at 20°C ambient temperature at rated current).



Packaging Code						
Packaging Code Prefix	Packaging Code Prefix Description					
ВК	100 fuses packed into a cardboard carton					
BK1	1,000 fuses packed into a poly bag					
TR2	1,500 fuses packed into tape on a reel (19.05mm lead wire length)					

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

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.

© 2009 Cooper Bussmann St. Louis, MO 63178 www.cooperbussmann.com







Data Sheet 2037



0409 BU-SB08329 Page 2 of 2