

# **S505**

# 5 mm x 20 mm, Ferrule time-delay, ceramic tube fuses



#### **Product features**

- · Time-delay high breaking capacity
- Designed to IEC 60127-2
- 0.5 A to 12 A current ratings
- Ceramic tube, nickel plated brass end cap construction
- · Halogen free, RoHS compliant, lead free
- Reference <u>S505SC data sheet (10132)</u> for available axial lead options

### **Applications**

Primary circuit protection:

- · LED and general lighting
- · LED/LCD televisions
- · Appliances and white goods
- · Printers and peripherals
- · Test equipment
- Power supplies

#### **Agency information**

- cURus Recognition file number: E19180, Guide JDYX2/JDYX8
- CSA file: 53787
- SEMKO file: 816547, 1119019
- VDE file: 40014091, 40024352, 40023140
- BSI file: KM55676
- IMQ file: CA03 00100, CA03 00529
- PSE: JET 1641-31003-1009, 1641-31003-1010, 1641-31003-1011, 1641-31003-1012, 1641-31003-2001, 1641-31003-2002
- CCC file: 2002010207011295, CQC 11012061930
- KC-Mark file: SU5011-4012A, SU5011-5004A

#### **Ordering**

• Use ordering code (see page 4 for details)

# Packaging prefixes

- BK- (100 parts in a cardboard carton)
- BK1- (1,000 parts in a bag)

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#### **Electrical characteristics**

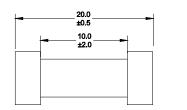
<u>I</u> n	1.5l <sub>n</sub> min minute	2.1I <sub>n</sub> max minute	2.75I <sub>n</sub> min ms	max s	4I min ms	max s	10l <sub>n</sub> min ms	max ms
< 1 A	60	30	250	80	50	5	5	150
1 A - 3.15 A	60	30	750	80	95	5	10	150
4 A - 6.3 A	60	30	750	80	150	5	10	150
8 A - 12 A	30	30	750	80	150	5	10	150

# **Product specifications**

Part number <sup>6</sup>	Current rating (A)	Voltage rating AC	Interrupting rating at rated AC voltage <sup>1</sup> (50 Hz) (A <sub>AC</sub> )	Typical DC cold resistance² (Ω)	Typical pre-arcing <sup>3</sup> I <sup>2</sup> t (A <sup>2</sup> s)	Typical voltage drop <sup>4</sup> (mV)	IMQ	VDE	SEMKO	cURus	CCC/ CQC	PSE- JET	CSA	KC	BSI
S505-500-R	0.5	250	1500	0.5070	0.188*	295	Χ	Χ	Χ	Χ	X <sup>5</sup>		Χ		Χ
S505-800-R	0.8	250	1500	0.2370	0.632*	189	Χ	Χ	Χ	Χ	X <sup>5</sup>		Χ		Χ
S505-1-R	1.0	250	1500	0.1401	1.28	152.5	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Х
S505-1.25-R	1.25	250	1500	0.1075	2.22	150	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-1.6-R	1.6	250	1500	0.0700	6.78	125	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-2-R	2.0	250	1500	0.0545	9.6	118.5	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-2.5-R	2.5	250	1500	0.0395	16.6	115	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-3.15-R	3.15	250	1500	0.0305	36.6	102.5	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-4-R	4.0	250	1500	0.0185	38.45*	86.5	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-5-R	5.0	250	1500	0.0131	71.30*	77.5	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-6.3-R	6.3	250	1500	0.0102	111*	75	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
S505-8-R	8.0	250	1500	0.0077	228*	73	Χ	Χ	Χ	Χ	X <sup>5</sup>	Χ	Χ	Χ	Χ
S505-10-R	10	250	1500	0.0061	397	72	Χ	Χ	Χ	Χ	X <sup>5</sup>	Χ	Χ	Χ	Χ
S505-12-R	12	250	1000	0.0053	713.7*	77		Χ		Χ					

<sup>1</sup> Interrupting ratings 500 mA to 10 A measured at 70% to 80% PF on AC. 12 A measured at

# Dimensions (mm)





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<sup>2</sup> Typical DC cold resistance measured at <10% of rated current at an ambient temperature of 20° C (reference only)

<sup>3</sup> Typical pre-arcing ( $l^2t$ ) measured at listed interrupting rating and voltage.

<sup>\*=</sup> measured at 10 times rated current under DC.

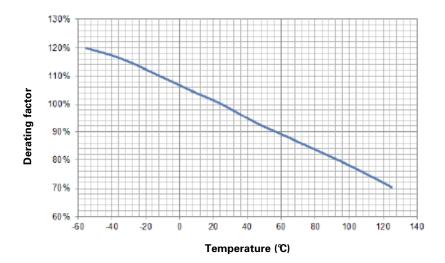
<sup>4</sup> Typical voltage drop measured at 20° C at rated current.

<sup>5</sup> CQC approval only

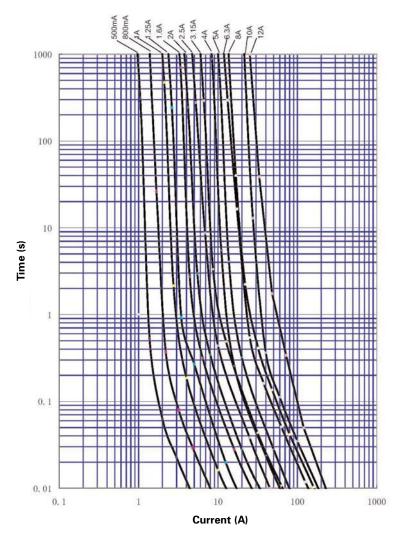
<sup>6</sup> Part number definition: S505-xxx-R S505= Product code and size xxx= Ampere rating

<sup>-</sup>R= Rohs compliant

# Temperature derating curve



#### Time vs. current curve



#### **Environmental data**

Operating temperature: - 55 °C to 125 °C (with derating)

#### **Ordering codes**

The ordering code is the part number replacing the "." with a "-" plus adding the packaging suffix.

#### **Packaging prefixes**

- BK- (100 parts in a cardboard carton)
- BK1- (1,000 parts in a bag)

	Ordering codes						
Part number	-BK option	-BK1 option					
S505-500-R	BK-S505-500-R	BK1-S505-500-R					
S505-800-R	BK-S505-800-R	BK1-S505-800-R					
S505-1-R	BK-S505-1-R	BK1-S505-1-R					
S505-1.25-R	BK-S505-1-25-R	BK1-S505-1-25-R					
S505-1.6-R	BK-S505-1-6-R	BK1-S505-1-6-R					
S505-2-R	BK-S505-2-R	BK1-S505-2-R					
S505-2.5-R	BK-S505-2-5-R	BK1-S505-2-5-R					
S505-3.15-R	BK-S505-3-15-R	BK1-S505-3-15-R					
S505-4-R	BK-S505-4-R	BK1-S505-4-R					
S505-5-R	BK-S505-5-R	BK1-S505-5-R					
S505-6.3-R	BK-S505-6-3-R	BK1-S505-6-3-R					
S505-8-R	BK-S505-8-R	BK1-S505-8-R					
S505-10-R	BK-S505-10-R	BK1-S505-10-R					
S505-12-R	BK-S505-12-R	BK1-S505-12-R					

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