

# 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 [S505SC data sheet \(10132\)](#) 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)

**Electrical characteristics**

$I_n$	1.5I <sub>n</sub> min <sup>n</sup> minute	2.1I <sub>n</sub> max minute	2.75I <sub>n</sub> min ms	max s	4I <sub>n</sub> min ms	max s	10I <sub>n</sub> min <sup>n</sup> 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

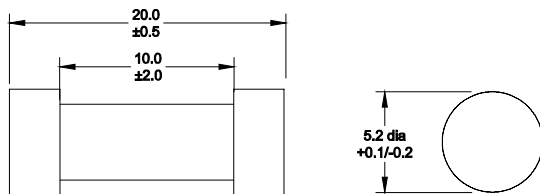
**Product specifications**

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 resistance <sup>2</sup> (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	X	X	X	X	X <sup>5</sup>		X		X
S505-800-R	0.8	250	1500	0.2370	0.632*	189	X	X	X	X	X <sup>5</sup>		X		X
S505-1-R	1.0	250	1500	0.1401	1.28	152.5	X	X	X	X	X	X	X	X	X
S505-1.25-R	1.25	250	1500	0.1075	2.22	150	X	X	X	X	X	X	X	X	X
S505-1.6-R	1.6	250	1500	0.0700	6.78	125	X	X	X	X	X	X	X	X	X
S505-2-R	2.0	250	1500	0.0545	9.6	118.5	X	X	X	X	X	X	X	X	X
S505-2.5-R	2.5	250	1500	0.0395	16.6	115	X	X	X	X	X	X	X	X	X
S505-3.15-R	3.15	250	1500	0.0305	36.6	102.5	X	X	X	X	X	X	X	X	X
S505-4-R	4.0	250	1500	0.0185	38.45*	86.5	X	X	X	X	X	X	X	X	X
S505-5-R	5.0	250	1500	0.0131	71.30*	77.5	X	X	X	X	X	X	X	X	X
S505-6.3-R	6.3	250	1500	0.0102	111*	75	X	X	X	X	X	X	X	X	X
S505-8-R	8.0	250	1500	0.0077	228*	73	X	X	X	X	X <sup>5</sup>	X	X	X	X
S505-10-R	10	250	1500	0.0061	397	72	X	X	X	X	X <sup>5</sup>	X	X	X	X
S505-12-R	12	250	1000	0.0053	713.7*	77		X		X					

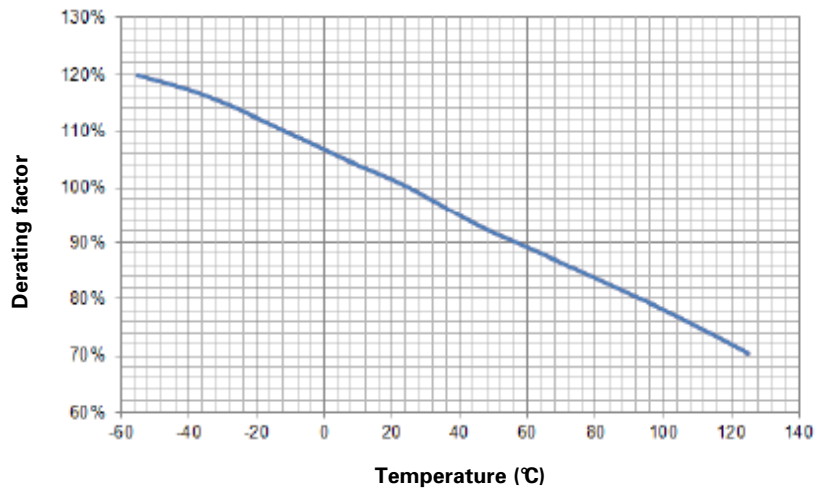
- 1 Interrupting ratings 500 mA to 10 A measured at 70% to 80% PF on AC. 12 A measured at 100% PF on AC.
- 2 Typical DC cold resistance measured at <10% of rated current at an ambient temperature of 20° C (reference only)
- 3 Typical pre-arcing (I<sup>2</sup>t) measured at listed interrupting rating and voltage.  
\* = measured at 10 times rated current under DC.

- 4 Typical voltage drop measured at 20° C at rated current.
- 5 CQC approval only
- 6 Part number definition: S505-xxx-R  
S505= Product code and size  
xxx= Ampere rating  
-R= Rohs compliant

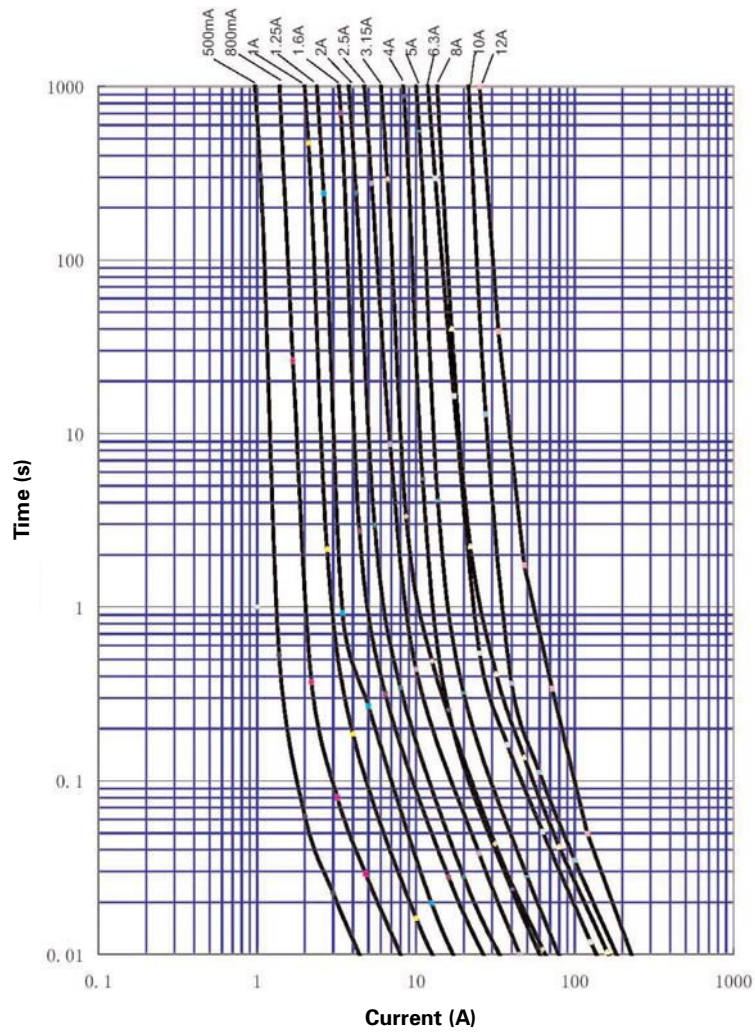
**Dimensions (mm)**



Temperature derating curve



Time vs. current curve



## Environmental data

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

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## 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)

Part number	Ordering codes	
	-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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Printed in USA  
Publication No. 2037 BU-MC17013  
February 2017