

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	$1.5I_n$ min minute	$2.1I_n$ max minute	$2.75I_n$ min ms	max s	$4I_n$ min ms	max s	$10I_n$ 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

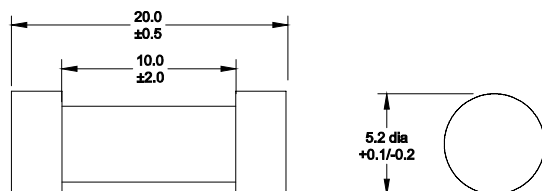
Product specifications

Part number ⁶	Current rating (A)	Voltage rating AC	Interrupting rating at rated AC voltage ¹ (50 Hz) (A_{AC})	Typical DC cold resistance ² (Ω)	Typical pre-arcing ³ I^2t (A^2s)	Typical voltage drop ⁴ (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 ⁵		X		X
S505-800-R	0.8	250	1500	0.2370	0.632*	189	X	X	X	X	X ⁵		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 ⁵	X	X	X	X
S505-10-R	10	250	1500	0.0061	397	72	X	X	X	X	X ⁵	X	X	X	X
S505-12-R	12	250	1000	0.0053	713.7*	77		X		X					

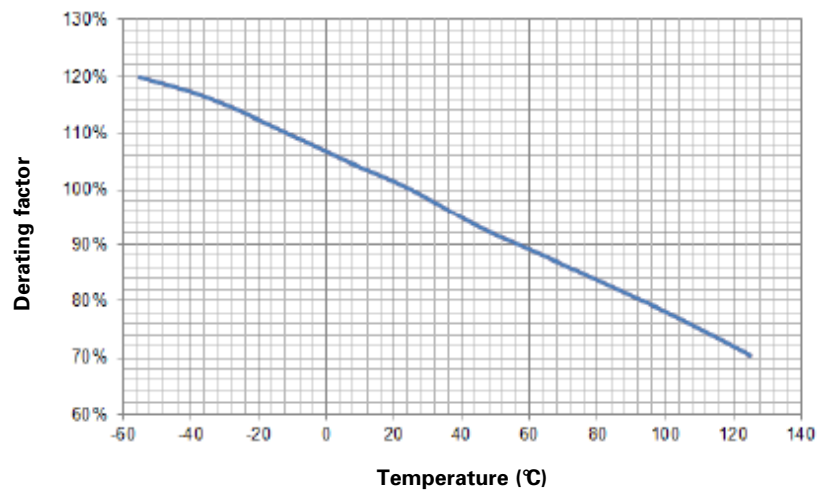
- 1 Interrupting ratings 500 mA to 10 A measured at 70% to 80% PF on AC. 12 A measured at 100% PF on AC.
2 Typical DC cold resistance measured at <10% of rated current at an ambient temperature of 20° C (reference only)
3 Typical pre-arcing (I^2t) measured at listed interrupting rating and voltage.
*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

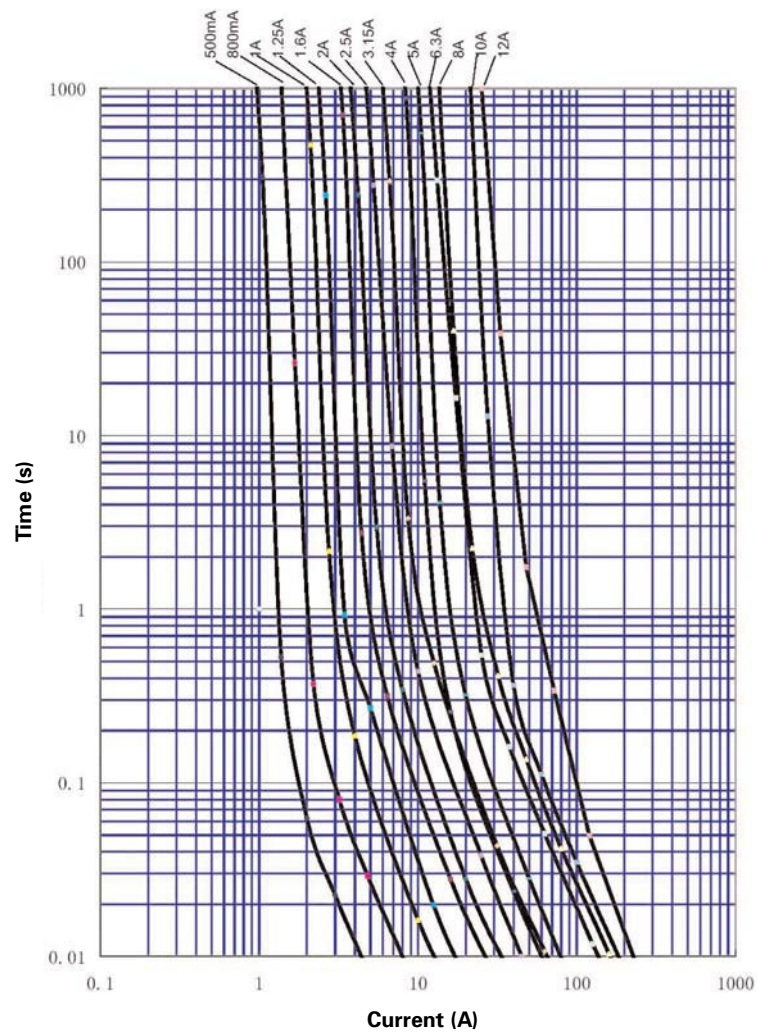
Dimensions (mm)



Temperature derating curve



Time vs. current curve



Environmental data

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)

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

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

© 2017 Eaton
All Rights Reserved
Printed in USA
Publication No. 2037 BU-MC17013
February 2017

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Eaton:

[BK/S505-3.15A](#) [BK/S505-5A](#) [BK/S505-4A](#) [BK/S505-2.5A](#) [BK/S505-500MA](#) [BK/S505-1-R](#) [BK/S505-5-R](#) [BK/S505-800-R](#) [BK/S505-6.3-R](#) [BK/S505-4-R](#) [BK/S505-3.15-R](#) [BK/S505-2.5-R](#) [BK/S505-2-R](#) [BK/S505-10-R](#) [BK/S505-1.25-R](#) [BK/S505-500-R](#) [BK/S505-1.6-R](#) [BK/S505-8-R](#) [BK/S505-800MA](#) [BK1-S505-1-25-R](#) [BK1-S505-1-6-R](#) [BK1-S505-2-5-R](#) [BK1-S505-3-15-R](#) [BK1-S505-3-15RY](#) [BK1-S505-6-3-R](#) [S505-1-25A](#) [S505-1-25-R](#) [S505-1-6A](#) [S505-1-6-R](#) [S505-2-5A](#) [S505-2-5-R](#) [S505-3-15A](#) [S505-3-15-R](#) [S505-6-3-R](#) [TR2-S505-V-6-3R](#) [BK1-S505-10-R](#) [BK1-S505-1-R](#) [BK1-S505-2-R](#) [BK1-S505-4-R](#) [BK1-S505-500-R](#) [BK1-S505-5-R](#) [BK1-S505-800-R](#) [BK1-S505-8-R](#) [BK-S505-V-10A](#) [BK-S505-V-10-R](#) [BK-S505-V-1-25A](#) [BK-S505-V-1-25R](#) [BK-S505-V-12-R](#) [BK-S505-V-1-6A](#) [BK-S505-V-1-6-R](#) [BK-S505-V-1-R](#) [BK-S505-V-2-5A](#) [BK-S505-V-2-5-R](#) [BK-S505-V-2A](#) [BK-S505-V-2-R](#) [BK-S505-V-3-15A](#) [BK-S505-V-3-15R](#) [BK-S505-V-4A](#) [BK-S505-V-4-R](#) [BK-S505-V-500MA](#) [BK-S505-V-500-R](#) [BK-S505-V-5A](#) [BK-S505-V-5-R](#) [BK-S505-V-6-3-R](#) [BK-S505-V-800MA](#) [BK-S505-V-800-R](#) [BK-S505-V-8A](#) [BK-S505-V-8-R](#) [BK/S505-1.6A](#) [BK/S505-1.25A](#) [BK/S505-10A](#) [BK/S505-2A](#) [S505-10-R](#) [S505-1-R](#) [S505-2-R](#) [S505-4-R](#) [S505-500-R](#) [S505-5-R](#) [S505-800-R](#) [S505-8A](#) [S505-8-R](#) [BK-S505-12-R](#) [BK1/S505-10-R](#) [BK1/S505-1.25-R](#) [BK1/S505-1.6-R](#) [BK1/S505-1-R](#) [BK1/S505-2.5-R](#) [BK1/S505-2-R](#) [BK1/S505-3.15-R](#) [BK1/S505-3.15RY](#) [TR2/S505-V-6.3R](#) [BK1/S505-4-R](#) [BK1/S505-500-R](#) [BK1/S505-5-R](#) [BK1/S505-6.3-R](#) [BK1/S505-800-R](#) [BK1/S505-8-R](#) [BK/S505-12-R](#) [BK/S505-V-10-R](#) [BK/S505-V-1.25R](#)