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[FUSEKIT R](#)

[FUSEKIT R](#)

EN

This Datasheet is presented by
the manufacturer

DE

Dieses Datenblatt wird vom
Hersteller bereitgestellt

FR

Cette fiche technique est
présentée par le fabricant

5 x 20mm Fuses

S500 Series, Fast-Acting, Glass Tube

Description

- Fast-acting, low breaking capacity
- Optional axial leads available
- 5 x 20mm physical size
- Glass tube with silver-plated (32-125mA) and nickel-plated (160mA-10A) endcaps
- Designed to IEC 60127-2 (160mA-10A)



Electrical Characteristics							
I_n	1.5 I_n min	2.1 I_n max	2.75 I_n min	max	4 I_n min	max	10 I_n max
32mA-125mA	60 min	30 min	—	—	—	—	—
160mA-6.3A	60 min	30 min	50 ms	2 sec	10 ms	300 ms	20 ms
8A-10A	30 min	30 min	50 ms	2 sec	10 ms	400 ms	40 ms

Agency Information

- cURus: File E19180, Guide JDYX2, JDYX8
- CSA Component Acceptance: File 1803366
- SEMKO Approval: File 414552
- VDE Approval: File 40014109
- BSI Approval: File KM55676
- IMQ Approval: File CA03.00097
- CCC Approval: File 2005010207155694

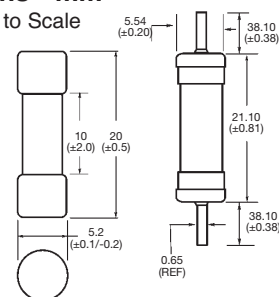
Ordering

Specify product code

- Insert packaging code prefix before part number. E.g.
BK/S500-32-R

Dimensions - mm

Drawing Not to Scale



- Ratings above 6.3A have a 0.8mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

Specify option code if desired

- For axial leads, insert "V" between catalog series and amp rating. E.g. S500-V-100-R

Specifications

Part Number	Voltage Rating Vac	Interrupting Rating (amps) at Rated Voltage (50Hz) Vac	Typical DC Cold Resistance (Ω)*	Typical Melting I [†] AC†	Maximum Voltage Drop (mV)‡	Agency Approvals						
						cURus	CSA	CCC	BSI	VDE	SEMKO	IMQ
S500-32-R	250	35	40	0.000047	3200							
S500-40-R	250	35	25	0.00011	2500							
S500-50-R	250	35	17	0.00020	2400							
S500-63-R	250	35	125	0.00057	2000							
S500-80-R	250	35	5.0	0.0012	1200							
S500-100-R	250	35	3.8	0.003	1100							
S500-125-R	250	35	2.8	0.005	1000							
S500-160-R	250	35	9.1	0.008	2000	X	X	X	X	X	X	X
S500-200-R	250	35	6.8	0.016	1700	X	X	X	X	X	X	X
S500-250-R	250	35	4.3	0.28	1400	X	X	X	X	X	X	X
S500-315-R	250	35	3.1	0.58	1300	X	X	X	X	X	X	X
S500-400-R	250	35	2.0	0.18	1100	X	X	X	X	X	X	X
S500-500-R	250	35	0.26	0.18	220	X	X	X	X	X	X	X
S500-630-R	250	35	0.20	0.35	220	X	X	X	X	X	X	X
S500-800-R	250	35	0.14	0.67	190	X	X	X	X	X	X	X
S500-1-R	250	35	0.125	0.60	200	X	X	X	X	X	X	X
S500-1.25-R	250	35	0.096	0.84	200	X	X	X	X	X	X	X
S500-1.6-R	250	35	0.066	1.6	190	X	X	X	X	X	X	X
S500-2-R	250	35	0.043	4.2	150	X	X	X	X	X	X	X
S500-2.5-R	250	35	0.034	6.1	150	X	X	X	X	X	X	X
S500-3.15-R	250	35	0.025	13	130	X	X	X	X	X	X	X
S500-4-R	250	40	0.021	22	130	X	X	X	X	X	X	X
S500-5-R	250	50	0.014	42	120	X	X	X	X	X	X	X
S500-6.3-R	250	63	0.010	69	120	X	X	X	X	X	X	X
S500-8-R	250	80	0.010	N/A	120	X	X		X	X	X	
S500-10-R	250	100	0.008	N/A	120	X	X		X	X	X	

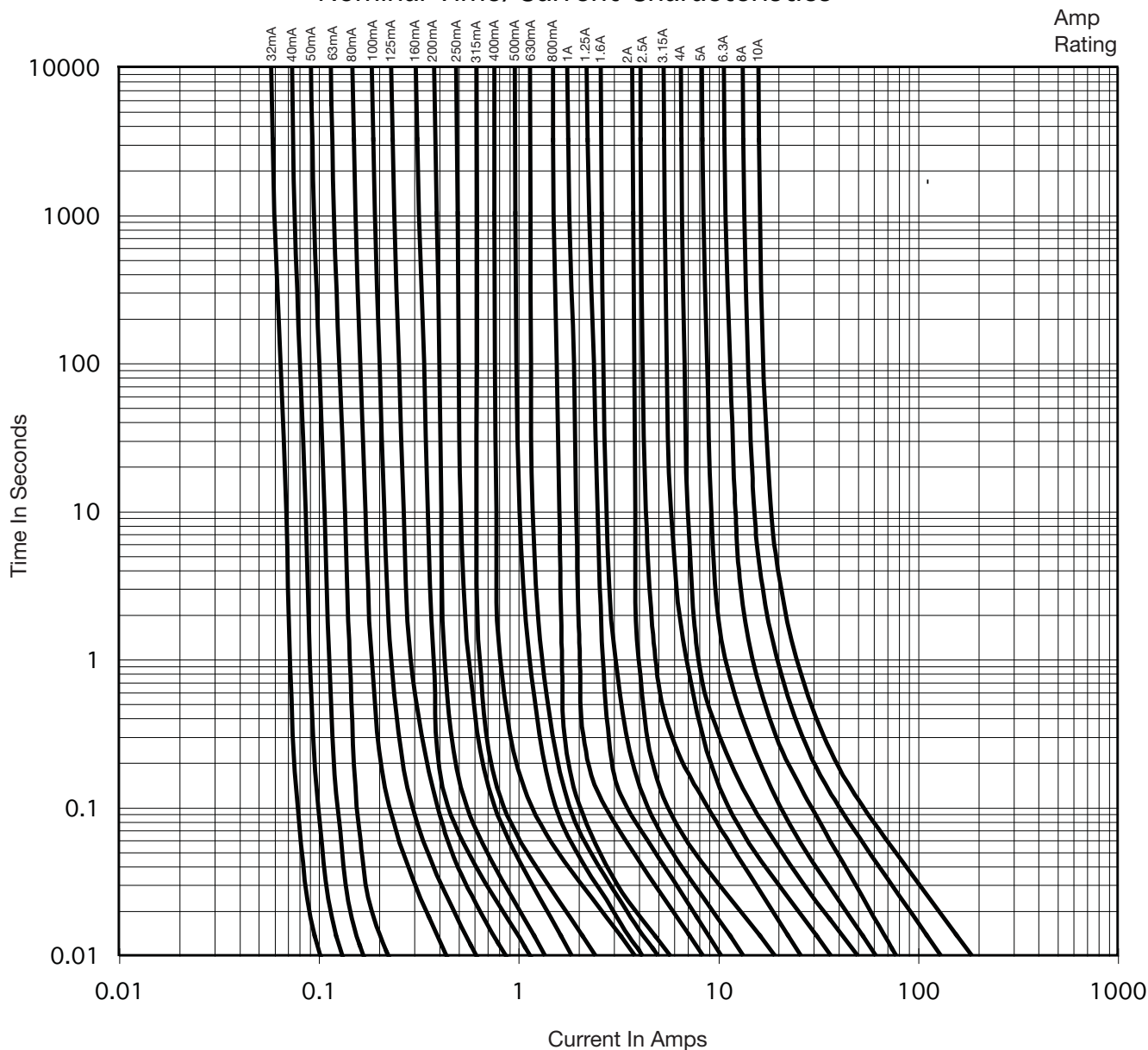
* DC Cold Resistance (Measured at <10% of rated current)

† Typical Melting I[†] (I[†] was measured at listed interrupting rating and rated voltage)

‡ Maximum Voltage Drop (Voltage drop was measured at 20°C ambient temperature at rated current)

Time-current Curve

Nominal Time/Current Characteristics



Packaging Code

Packaging Prefix	Description
BK	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 endcaps

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5 x 20mm Fuses

S501 Series, Fast-Acting, Ceramic Tube

Description

- Fast-acting high breaking capacity
- Optional axial leads available
- 5 x 20mm physical size
- Ceramic tube with silver-plated (50mA-400mA) and nickel-plated (500mA-10A) endcaps.
- Designed to IEC 60127-2



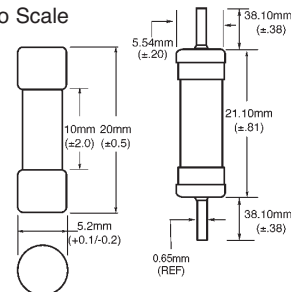
Electrical Characteristics							
I _n	1.5 I _n min	2.1 I _n max	2.75 I _n min	max	4 I _n min	max	10 I _n max
50mA-4A	60 min	30 min	10 ms	2 sec	3 ms	300 ms	20 ms
5A-6.3A	60 min	30 min	10 ms	3 sec	3 ms	300 ms	20 ms
8A-10A	30 min	30 min	40 ms	20 sec	10 ms	1 s	30 ms

Agency Information

- cURus: File E19180, Guide JDYX2, JDYX8
- CSA Component Acceptance: File 53787
- SEMKO Approval: File 413779
- VDE Approval: File 40015517
- IMQ Approval: File EB405
- CCC Approval: File 2005010207155691
- BSI Approval: File KM55676

Dimensions - mm

Drawing Not to Scale



Ordering

- Specify packaging, product, and option code
- Ratings above 6.3A have a 0.8mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

Specifications													
Product Code	Voltage Rating Vac	Interrupting Rating at Rated Voltage (50Hz) Vac	Typical DC Cold Resistance (Ω)*	Typical Melting I [†] (amps)	Typical Voltage Drop (mV)†	Agency Approvals							
						IMQ	VDE	BSI	SEMKO	cURus	CCC	MITI/JET	CSA
S501-50-R	250	1500	157.5	0.0017	9000	X	X	X	X	X	X		X
S501-63-R	250	1500	39.0	0.0005	3300					X	X		X
S501-80-R	250	1500	27.9	0.0011	2600					X			X
S501-100-R	250	1500	20.0	0.0018	2300					X			X
S501-125-R	250	1500	12.3	0.0037	1900					X			X
S501-160-R	250	1500	8.5	0.008	1600	X	X	X	X	X	X		X
S501-200-R	250	1500	6.0	0.02	1350	X	X	X	X	X	X		X
S501-250-R	250	1500	4.4	0.027	1300	X	X	X	X	X	X		X
S501-315-R	250	1500	3.3	0.01	1400	X	X	X	X	X	X		X
S501-400-R	250	1500	2.2	0.018	1200					X			X
S501-500-R	250	1500	0.460	0.038	1050	X	X	X	X	X	X		X
S501-630-R	250	1500	0.340	0.064	1200					X			X
S501-800-R	250	1500	0.245	0.097	490	X	X	X	X	X	X		X
S501-1-R	250	1500	0.231	0.146**	330		X		X	X	X	X	
S501-1.25-R	250	1500	0.176	0.313**	297				X	X	X	X	
S501-1.6-R	250	1500	0.113	0.748**	239		X		X	X	X	X	
S501-2-R	250	1500	0.073	2.0	205	X	X	X	X	X	X	X	X†
S501-2.5-R	250	1500	0.053	3.9	190	X	X	X	X	X	X	X	X†
S501-3.15-R	250	1500	0.037	8.1	160	X	X	X	X	X	X	X	X†
S501-4-R	250	1500	0.027	14	160	X	X	X	X	X	X	X	X†
S501-5-R	250	1500	0.019	25	155	X	X	X	X	X	X	X	X†
S501-6.3-R	250	1500	0.014	48	150	X	X	X	X	X	X		X
S501-8-R	250	1500	0.009	N/A	N/A	X	X	X	X	X			X
S501-10-R	250	1500	0.008	N/A	N/A	X	X	X	X	X			X

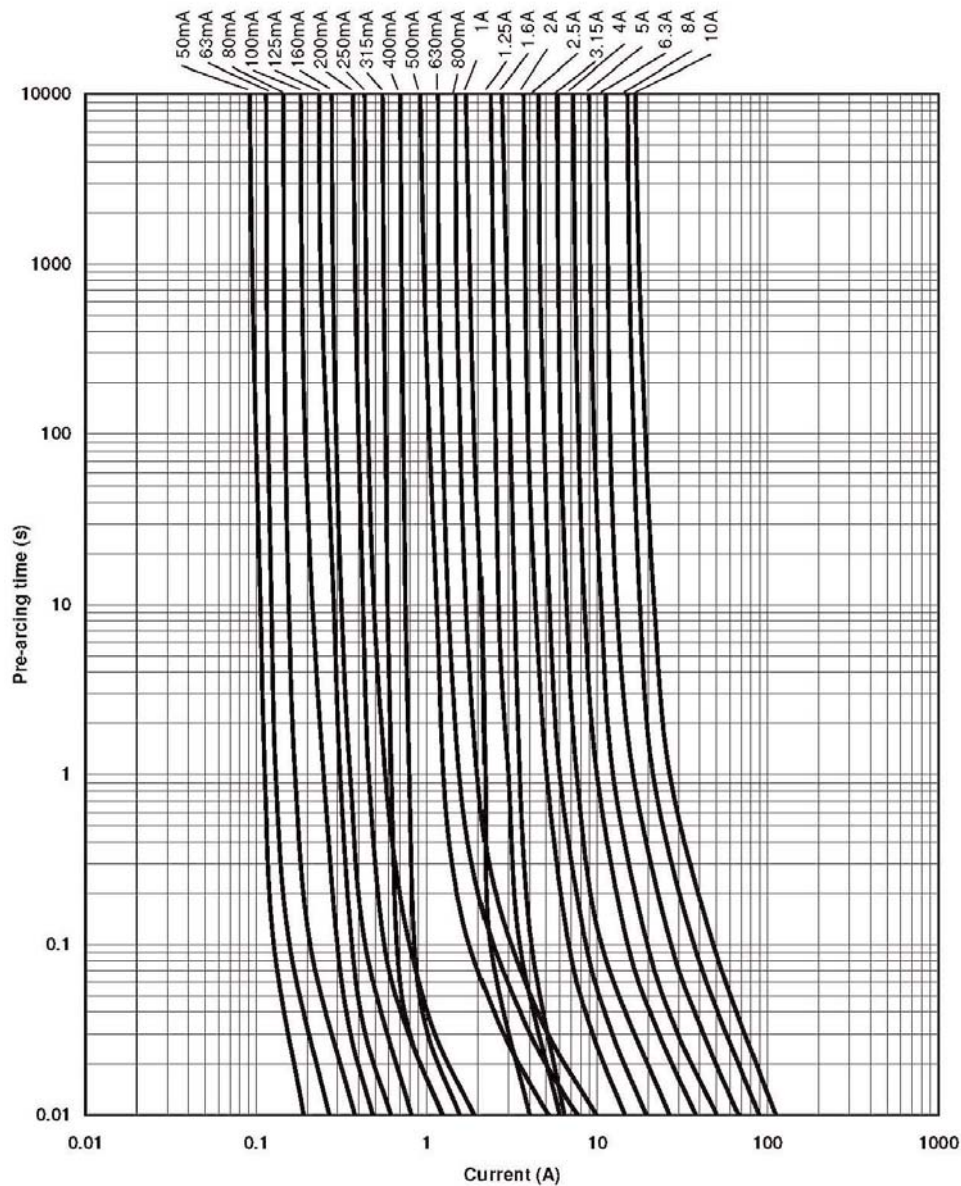
* DC Cold Resistance (measured at <10% of rated current)

** I[†] of 1A, 1.25A & 1.6A is measured at 10I_n DC

† Typical Voltage Drop (voltage drop was measured at 20°C ambient temperature at rated current)

‡ CSA approvals on these ratings will not be marked on the fuse cap

Time -Current Curve



Packaging Code	
Packaging Code	Description
BK	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 endcaps

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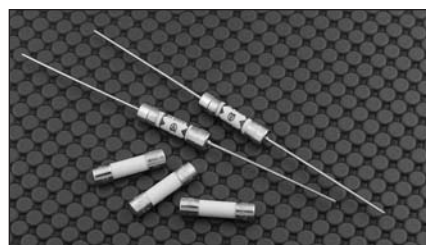
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5 x 20mm Fuses

S505 Series, Time-Delay, Ceramic Tube

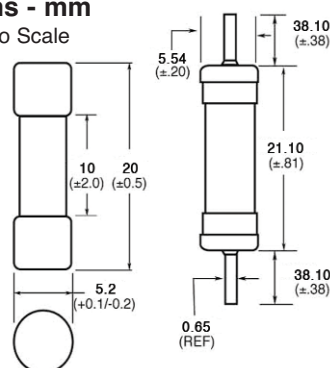
Description

- 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



Dimensions - mm

Drawing Not to Scale



Electrical Characteristics								
	1.5 I _n		2.1 I _n		2.75 I _n		4 I _n	
I _n	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
- Specify option codes if desired
 - For axial leads, insert "V" between catalog series and amp rating. E.g., BK/S505-V-1-R

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

* Interrupting ratings (500mA to 10A were measured at 70% to 80% PF on.

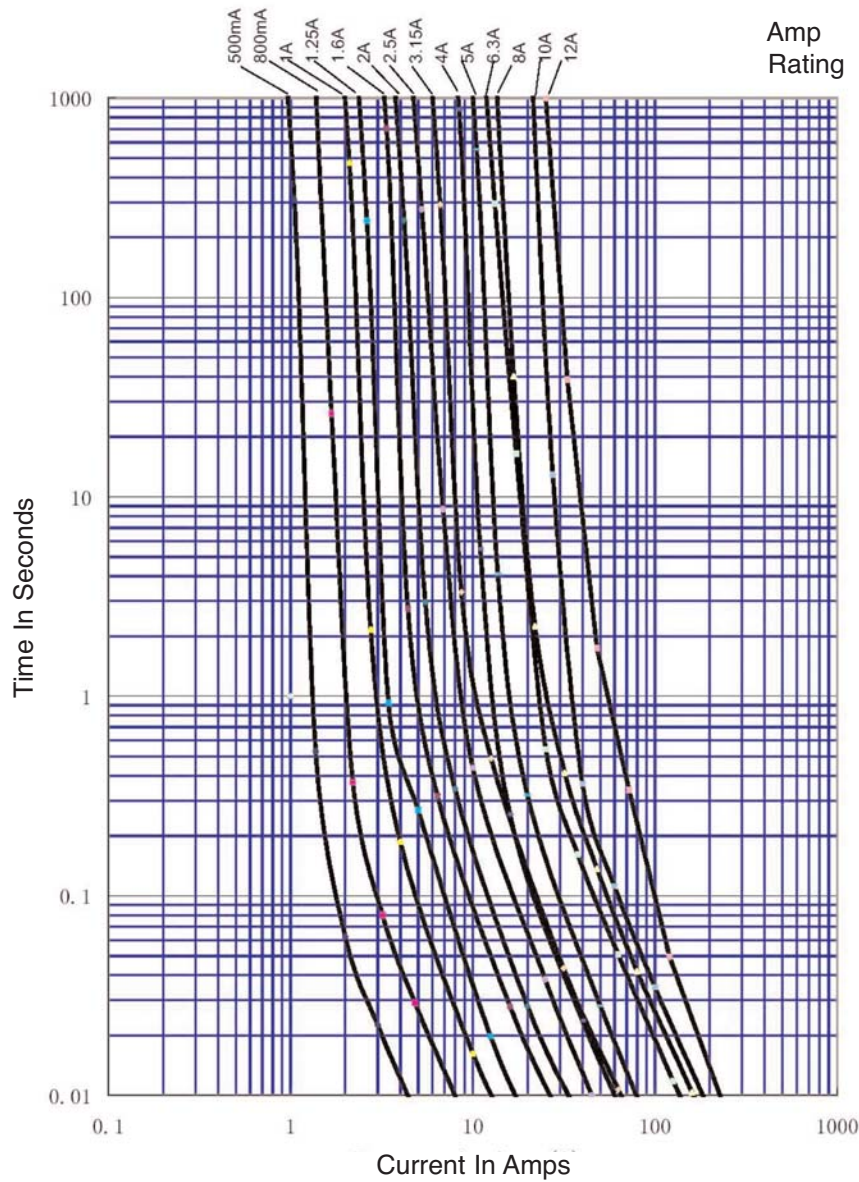
** Typical DC Cold Resistance (Measured At <10% of rated current).

*** Typical Pre-Arching I_t (Measured at listed interrupting rating and rated voltage if not specified).

† The typical I_t value was measured at 10 times of rated current under DC.

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

S505-R(500mA to 12A) Nominal Current Vs. Time Curve



Packaging Code

Packaging Code Prefix	Description
BK	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

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5 x 20mm Fuses

S506 Series, Time-Delay, Glass Tube

Description

- Time-delay, low breaking capacity
- Optional axial leads available
- 5 x 20mm physical size
- Glass tube, nickel-plated brass endcap construction
- Designed to IEC 60127-2/3 (32mA-10A) & extensions:12.5A-15A



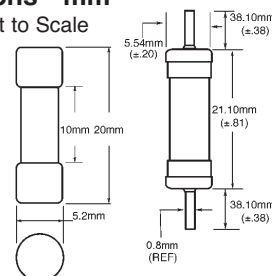
S506 Electrical Characteristics							
I_n	$2.1 I_n$ max	$2.75 I_n$ min max	$4 I_n$ min max	$10 I_n$ min max			
32mA-100mA	2 min	200 ms	10 sec	40 ms	3 sec	10 ms	300 ms
125mA-6.3A	2 min	600 ms	10 sec	150 ms	3 sec	20 ms	300 ms
8A-15A	2 min	600 ms	10 sec	150 ms	3 sec	20 ms	300 ms

Agency Information

- UL Recognized Card: Guide JDYX2, File E19180
- CSA Component Acceptance: File 1803366
- cURus Recognition: Guide JDYX8, File E19180
- SEMKO Approval: File 507078, 415434, 806492
- VDE Approval: File 40011926
- BSI Approval: File KM55676
- IMQ Approval: File E1921, CA03.00530
- PSE/JET: File JET1641-31003-1005, JET1641-31003-1006
- CCC Approval: File 2005010207155693, 2002010207011294

Dimensions - mm

Drawing Not to Scale



- Ratings above 4A have a 0.81mm diameter lead

Ordering

Specify product code

- Insert packaging code prefix before part number. E.g. BK/S506-1-R

Specify option code if desired

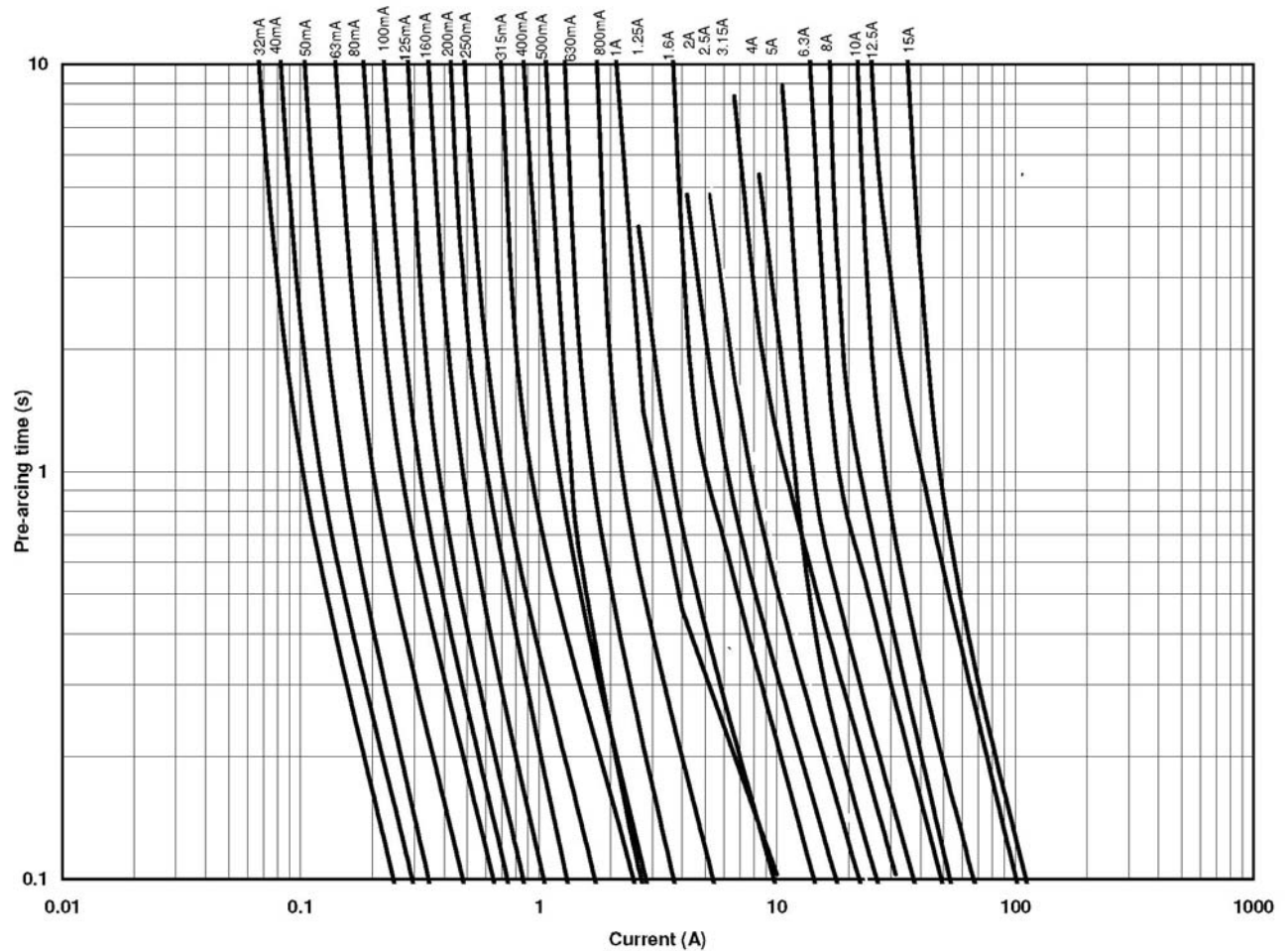
- For axial leads, insert "V" between catalog series and amp rating. E.g. BK/S506-V-2-R

Product Code	Voltage Rating Vac	Interrupting Rating (amps) at Rated Voltage (50Hz) Vac	Typical DC Cold Resistance (Ω)*	Specifications		Agency Approvals								
				Typical Melting I ^t (amps)	Typical Voltage Drop (mV)‡	IMQ	VDE	BSI	SEMKO	UR	CCC	PSE/JET	CSA	cURus
S506-32-R	250	35	21.0	0.0051	1050	X	X	X	X	X	X			
S506-40-R	250	35	13.90	0.0072	920	X	X	X	X	X	X			
S506-50-R	250	35	9.24	0.0095	800	X	X	X	X	X	X		X	
S506-63-R	250	35	6.96	0.021	760	X	X	X	X	X	X		X	
S506-80-R	250	35	4.42	0.038	580	X	X	X	X	X	X		X	
S506-100-R	250	35	2.80	0.045	490	X	X	X	X	X	X		X	
S506-125-R	250	35	1.97	0.063	390	X	X	X	X	X	X		X	
S506-160-R	250	35	1.27	0.093	320	X	X	X	X	X	X		X	
S506-200-R	250	35	1.00	0.114	340	X	X	X	X	X	X		X	
S506-250-R	250	35	0.640	0.265	270	X	X	X	X	X	X		X	
S506-315-R	250	35	0.450	0.621	250	X	X	X	X	X	X		X	
S506-400-R	250	35	0.31	0.872	210	X	X	X	X	X	X		X	
S506-500-R	250	35	0.183	0.827	140	X	X	X	X	X	X		X	X
S506-630-R	250	35	0.186	1.33	150	X	X	X	X	X	X		X	X
S506-800-R	250	35	0.129	2.78	75	X	X	X	X	X	X		X	X
S506-1-R	250	35	0.0757	6.45	87.5	X	X	X	X	X	X	X	X	X
S506-1.25-R	250	35	0.060	10.05	86	X	X	X	X	X	X	X	X	X
S506-1.6-R	250	35	0.0425	21.7	82	X	X	X	X	X	X	X	X	X
S506-2-R	250	35	0.03325	31.6	77	X	X	X	X	X	X	X	X	X
S506-2.5-R	250	35	0.0255	59.4	72.5	X	X	X	X	X	X	X	X	X
S506-3.15-R	250	35	0.0185	96.4	68.5	X	X	X	X	X	X	X	X	X
S506-4-R	250	40	0.0139	71.8	67	X	X	X	X	X	X	X	X	X
S506-5-R	250	50	0.00985	142.5	60.5	X	X	X	X	X	X	X	X	X
S506-6.3-R	250	63	0.0071	237.6	54	X	X	X	X	X	X	X	X	X
S506-8-R	250	80	0.007	255.8	55	X	X	X	X	X		X	X	X
S506-10-R	250	100	0.005	450	54	X	X	X	X	X		X	X	X
S506-12.5-R	250	125	0.004	1019.5	45					X		X		X
S506-15-R	250	125	0.004	1091.7	65.5					X		X		X

* DC Cold Resistance (measured at <10% of rated current)

‡ Typical Voltage Drop (voltage drop was measured at 20°C ambient temperature at rated current)

Nominal Time-Current Characteristics of S506-R



Packaging Code

Packaging Code Suffix	Description
BK	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 endcaps

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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.

TDC180

British Plug Top Fuse

Fast/Medium



Catalog Symbol:TDC180

FAST/MEDIUM BRITISH PLUG TOP FUSE

240Vac

BS1362, IEC 269-3A

Electrical Ratings (Catalog Symbol and Amperes)

240Vac

TDC180-1A	TDC180-5A	TDC180-13A
TDC180-2A	TDC180-7A	—
TDC180-3A	TDC180-10A	—

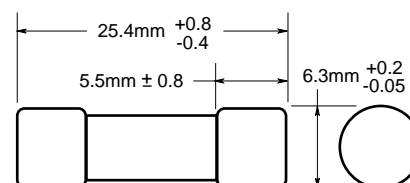
Rated Current	Rated Volt AC	Breaking Capacity	Power Dissipation Max.	Color	Approvals
1A	240 (264 max.)	6000A 264VAC, 50Hz p.f. 0.3 - 0.4	1 Watt	Black	Asta, CCC
2A				Black	
3A				Red	
5A				Black	
7A				Black	
10A				Black	
13A				Brown	

- **Type TDC180.**
- 1/4" x 1" fast/medium British plug top fuse.
- Ceramic tube - end caps: - 2-5A nickel-plated brass
- 1A & 7A silver-plated copper
- 10-13A nickel-plated copper
- Packaging: x 10, x 100, x 1000.
- Weight: 2.25g ± 0.15g (2A to 13A inclusive)

CE CE logo denotes compliance with European Union Low Voltage Directive (50-1000Vac, 75-1500Vdc). Refer to Data Sheet: 8002 or contact Bussmann Application Engineering at 636-527-1270 for more information.

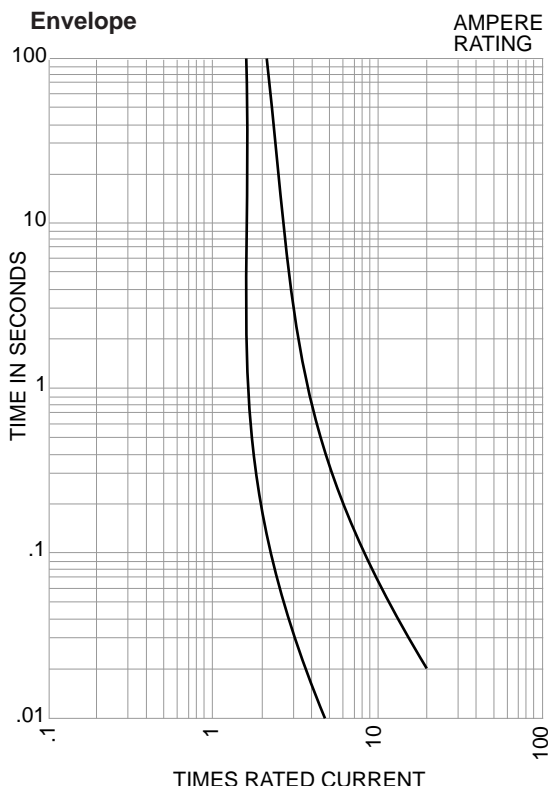
**Complies with EU Directive
2002/95/EC (RoHS)**

Dimensional Data



Limits for Pre-arcing Time

In	1.0 In.	1.6 In.	1.9 In.
	MIN	MIN	MAX
1A - 13A	1000 hours	30 min.	30 min.



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