

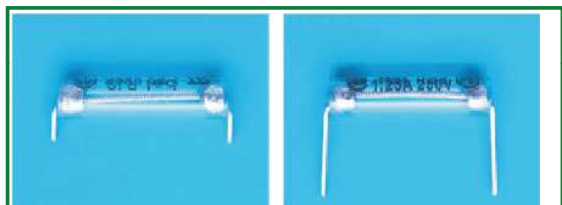
Type RJS

Telecom - Power Cross Protection & Ballast Protection

RoHS 6 Compliant



RJS Series, Telecom - Power Cross Protection & Ballast Protection Fuse



Description

RJS Fuses are primarily intended for use in telecommunication circuit applications requiring low current protection with high surge tolerance. They are typically used to replace heat coil type devices. They are designed to be placed between the line input and the surge arresting components (mov. gas tube, zenor diode, air gaps, etc.)

These fuses will withstand transient surge currents generated by lighting in accordance with the attached table.

RJS fuses guard protected circuitry against sustained overload or short circuit conditions. Such sustained overloads may be generated by accidental contact between utility cables and phone lines (power line cross).

RJS Fuse are primarily designed for use in telecommunications circuits which require compliance with the test requirements specified in UL/IEC 1950 / 60950 and Telcordia GR 1089, Issue 3.

Features

- Axial lead surge resistant slow blow fuse
- Meet UL 60950 power cross requirements
- Designed for compliance with Telcordia GR-1089-CORE
- Designed to serve the requirements of a wide range of telecommunication and networking equipment.
- RoHS6 compliant
- Halogen Free
- Leadfree

Applications

- Fax machines
- Answering machines
- Telecommunication circuit
- Ballast Protection

LEAD FREE =

HALOGEN FREE =

Electrical Characteristics (UL / CSA STD.248-14)

Testing Current	Blow Time	
	Minimum	Maximum
100%	4 Hrs.	N/A
135%	N/A	1 Hr
200%	3 sec	20 sec
500%	100 msec	1.5 sec
1000%	30 msec	300 msec

Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	Power Factor	AMPERE RANGE / VOLT @ I.R.ABILITY	Intended Application
	E20624	0.7-0.8	100mA - 5A / 125V AC @10,000A	General Purpose
		0.7-0.8	100mA - 5A / 250V AC @200A	Primary Protection
	LR39772	Resistive	100mA - 5A / 350V AC @100A	Ballast Protection
		Resistive	100mA - 5A / 600V AC @60A	Telecom Protection
		Resistive	100mA - 5A / 600V AC @100A	General Purpose / Telecom Protection
			100mA - 5A / 125V AC @10,000A 100mA - 5A / 250V AC @200A 100mA - 5A / 350V AC @100A 100mA - 5A / 600V AC @100A 100mA - 5A / 600V AC @60A	

Specifications subject to change without notice

Type RJS

Telecom - Power Cross Protection & Ballast Protection

RoHS 6 Compliant



RJS May2012D

Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) Max.	Voltage Rating (V)	Interrupting Rating	Melting I ₂ T <10 m Sec (A ² Sec)	Melting I ₂ T @ 10 In (A ² Sec)	Peak Surge Current (Amp) 50 Pulses 1,000V 10uS x 1000uS	Maximum Power Dissipation (W)	Agency Approvals		
RJS 100-R	100mA	17.5	2.76	600	100mA - 5A / 125V AC @10,000A 100mA - 5A / 250V AC @200A 100mA - 5A / 350V AC @100A 100mA - 5A / 600V AC @100A	0.09	0.11	6	0.41	Y	Y	Y
RJS 125-R	125mA	11.5	2.30	600		0.13	0.17	8	0.43	Y	Y	Y
RJS 160-R	160mA	7.10	2.01	600		0.21	0.26	10	0.46	Y	Y	Y
RJS 200-R	200mA	4.94	1.56	600		0.33	0.41	13	0.49	Y	Y	Y
RJS 250-R	250mA	3.20	1.26	600		0.51	0.64	16	0.53	Y	Y	Y
RJS 300-R	300mA	2.16	1.16	600		0.8	1.0	20	0.56	Y	Y	Y
RJS 350-R	350mA	1.77	1.10	600		1.0	1.3	24	0.58	Y	Y	Y
RJS 400-R	400mA	1.48	0.91	600		1.2	1.6	29	0.60	Y	Y	Y
RJS 500-R	500mA	0.82	0.65	600		1.9	2.4	36	0.64	Y	Y	Y
RJS 600-R	600mA	0.62	0.59	600		3.0	3.8	46	0.68	Y	Y	Y
RJS 700-R	700mA	0.50	0.58	600		3.8	4.8	54	0.70	Y	Y	Y
RJS 750-R	750mA	0.435	0.55	600		4.3	5.5	58	0.71	Y	Y	Y
RJS 1-R	1A	0.248	0.39	600		7.4	9.3	80	0.77	Y	Y	Y
RJS 1.25-R	1.25A	0.166	0.33	600		12	15	100	0.82	Y	Y	Y
RJS 1.5-R	1.5A	0.121	0.29	600		17	21	120	0.86	Y	Y	Y
RJS 2-R	2A	0.080	0.26	600		28	36	155	0.93	Y	Y	Y
RJS 2.5-R	2.5A	0.056	0.24	600		44	56	190	0.99	Y	Y	Y
RJS 3-R	3A	0.043	0.22	600		69	87	230	1.06	Y	Y	Y
RJS 4-R	4A	0.027	0.18	600		108	136	300	1.13	Y	Y	Y
RJS 5-R	5A	0.020	0.16	600		169	212	370	1.20	Y	Y	Y

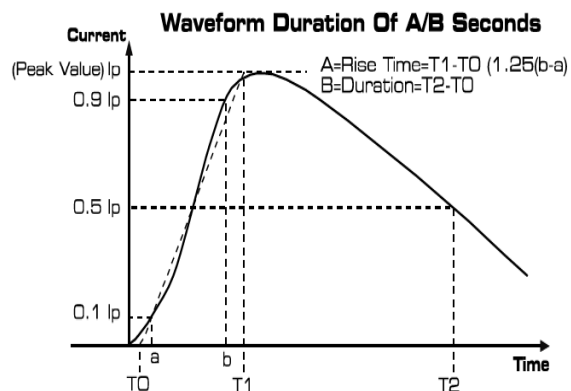
Consult manufacturer for other ratings

Power Cross (Telecom) Rating (Fuse Rated 0.1 - 1.5A)

Overload Current	Voltage	Clearing Time Limit
135% Fuse rating	600V	Less than 1 hour
200% Fuse Rating	600V	Less than 20 seconds
2.2A	600V	Less than 10 minutes
7A	600V	Less than 1 seconds
40A	600V	Less than 50 msec
60A	600V	Less than 20 msec

Specifications subject to change without

Double - exponential Impulse Waveform



CORPORATE OFFICE
Bel Fuse Inc.
 206 Van Vorst Street
 Jersey City, NJ 07302
 Tel 201-432-0463
 Fax 201-432-9542
 E-Mail: belfuse@belf.com
 Website: www.belfuse.com

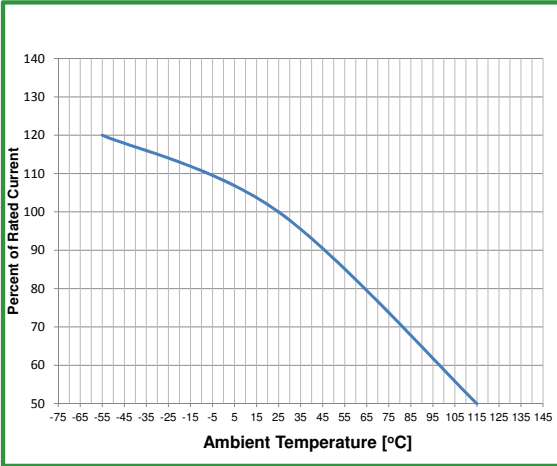
FAR EAST OFFICE
Bel Fuse Ltd.
 8/F Luk Hop Industrial Building
 8 Luk Hop Street
 San Po Kong
 Kowloon, Hong Kong
 Tel 852-2328-5515
 Fax 852-2352-3706

EUROPE OFFICE
Bel Fuse Europe Ltd.
 Preston Technology Management Centre
 Marsh Lane, Suite F15
 Preston, Lancashire, PR1 8UQ
 United Kingdom
 Tel 44-1772-556601
 Fax 44-1772-561008

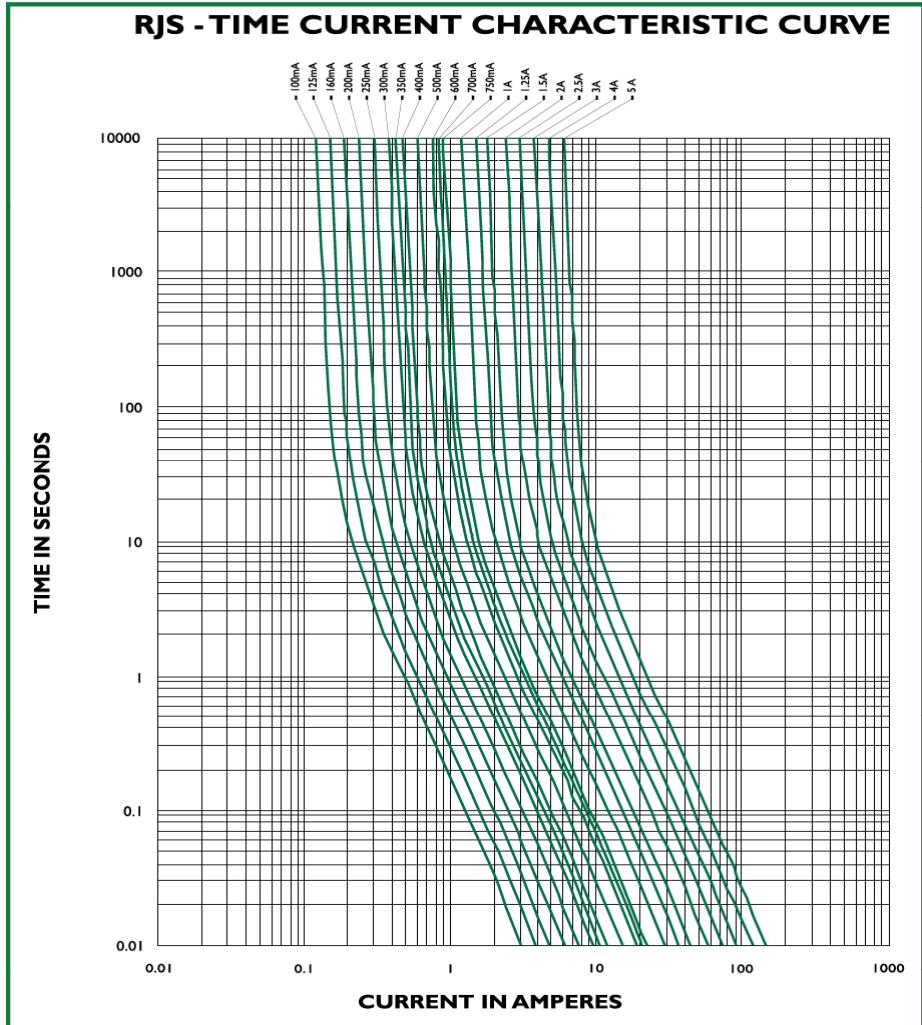
EUROPE
Bel Stewart GmbH
 Industriestrasse 20
 61381 Friedrichsdorf
 Germany
 Tel 49-6172-9552-0
 Fax 49-6172-9552-40



Temperature Derating Curve

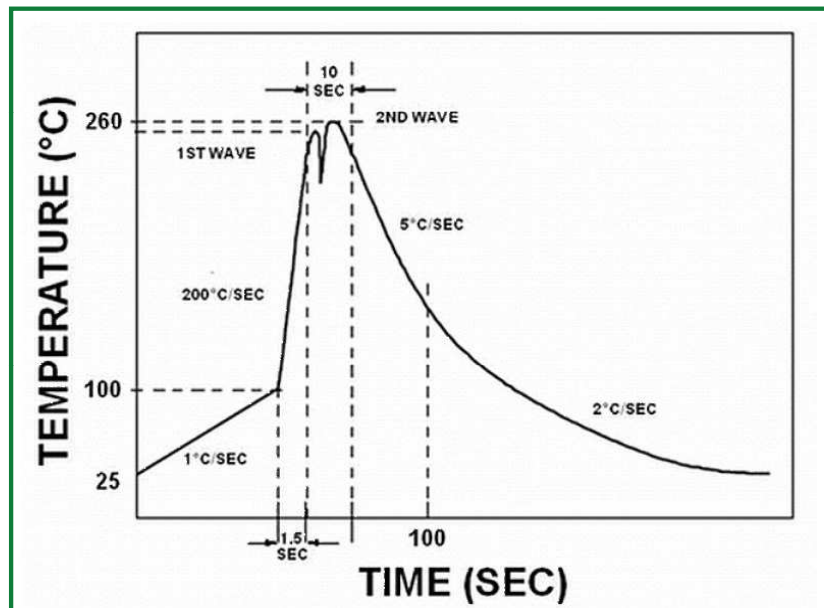


Average Time Current Curve



Soldering Parameters

Lead-free Wave Soldering Profile	
Wave Soldering Parameter	
Average ramp-up rate	200°C / second
Heating rate during preheat	typical 1 - 2 °C / second Max. 4°C/ second
Final preheat temperature	within 125°C of soldering temperature
Peak temperature T _p	260°C
Time within +0 °C / -5°C of actual peak temperature	10 seconds
Ramp-down rate	5 °C / second max.



Type RJS

Telecom - Power Cross Protection & Ballast Protection

RoHS 6 Compliant



RJS May2012D

Physical Specifications

Materials	Body : Glass
	Leads: Matte Tin Plated Copper, Diameter 0.032"
Marking	On Fuse:
	"bel", "RJS", "Current Rating", "Voltage Rating",
	"Appropriate Safety Logos", " (RoHS 6 compliant)
	On label:
	"bel", "RJS", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and " (China RoHS compliant).

Environmental Specifications

Shock Resistance	MIL-STD-202G, Method 213B, Test Condition I (100 G's peak for 6 milliseconds; Sawtooth Waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test condition B (48 hrs).
Insulation Resistance	MIL-STD-202G, Method 302, Test Condition A (After Opening) 10,000 ohms minimum.
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G Method 210F, Test Condition B. (260+/-5°C, 10+/- 1 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65°C to +125°C).
Operating Temperature	-55°C to +125°C
Terminal Strength	IEC-68-2-21

Mechanical Dimensions

	Standard Lead	Short Lead
A	0.76" +/- 0.01" (19.3 +/- 0.2mm)	0.76" +/- 0.01" (19.3 +/- 0.2mm)
B	0.80" +/- 0.05" (20.3 +/- 1.27mm)	0.80" +/- 0.05" (20.3 +/- 1.27mm)
C	0.4" Typical (10.0mm)	0.11" +/- 0.01" (2.8 +/- 0.25mm)
D	0.18" max (4.6mm)	0.18" max (4.6mm)

Ordering Information

0643 R XXXX - X X

FUSE TYPE ————— 0643

R = RoHS Compliant —————

AMPERE RATING —————
Refer to fuse FGNO explanation table

PIGTAIL CODE & PACKAGING CODE —————
0 = Standard lead length, 0.40"; 2000 pcs / Bulk bag / Box
1 = Short lead length, 0.11"; 500 pcs / Bulk bag / Box

LEAD SPACING —————
1 = 0.90 Inch lead spacing
2 = 0.80 Inch lead spacing

* Diameter lead 0.032" for all ratings

Specifications subject to change without notice

Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk (Short lead)	N/A	500	12	N/A
Bulk (Standard lead)	N/A	2000	02	N/A

CORPORATE OFFICE

Bel Fuse Inc.
206 Van Vorst Street
Jersey City, NJ 07302
Tel 201-432-0463
Tel 201-432-9542
Fax 201-432-9542
E-Mail: belfuse@belf.com
Website: www.belfuse.com

FAR EAST OFFICE

Bel Fuse Ltd.
8/F Luk Hop Industrial Building
8 Luk Hop Street
San Po Kong
Kowloon, Hong Kong
Tel 852-2328-5515
Tel 852-2352-3706

EUROPE OFFICE

Bel Fuse Europe Ltd.
Preston Technology Management Centre
Marsh Lane, Suite F15
Preston, Lancashire, PR1 8UQ
United Kingdom
Tel 44-1772-556601
Tel 44-1772-561008

EUROPE

Bel Stewart GmbH
Industriestrasse 20
61381 Friedrichsdorf
Germany
Tel 49-6172-9552-0
Fax 49-6172-9552-40