

# Type RJS

RoHS Compliant

## Telecom - Power Cross Protection & Ballast Protection

RJSD0106



**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 lightning 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** fuses 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.

### 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

### Approvals



Safety Agency Approvals	Interrupting Rating	Power Factor	Intended Application
Recognized File no. E20624	10,000A, 125Vac	0.7 - 0.8	General Purpose
	200A, 250Vac	0.7 - 0.8	Primary Protection
Acceptance File no. LR39772	100A, 350Vac	Resistive	Ballast Protection
	60A, 600Vac	Resistive	Telecom Protection

### RoHS Compliant Product

For RoHS Compliant Version, add suffix "R" after catalog number

### Environmental Specification

#### Soldering Techniques & Compatibility

Wave Solder: 260°C, 10 sec max. (MIL-STD-202, Method 210)

#### Shock

MIL-STD-202, Method 213, Test Condition I  
(100 G's peak for 6 milliseconds)

#### Vibration

MIL-STD-202, Method 201 (10-55 Hz, 0.06 inch, total excursion)

#### Salt Spray

MIL-STD-202, Method 101, Test condition B (48 hrs)

#### Insulation Resistance

MIL-STD-202, Method 302, Test Condition A  
(After Opening) 10,000 ohms minimum

#### Solderability

MIL-STD-202, Method 208

#### Resistance to solder Heat

MIL-STD-202, Method 210, Test Condition C (260°C, 20 sec)

#### Thermal Shock

MIL-STD-202, Method 107, Test Condition B (-65°C to +125°C)

#### Operating Temperature

-55°C to +125°C

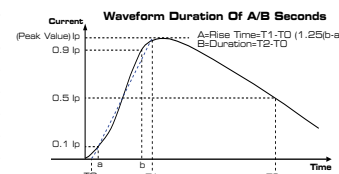
Catalog Number	RoHS Suffix	Ampere Rating	Voltage Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Vol) max.	Melting I <sup>2</sup> T < 10 mSec (A <sup>2</sup> Sec)	Melting I <sup>2</sup> T @ 10 In (A <sup>2</sup> Sec)	Peak Surge Current (Amp) 50 Pulses 1,000V 10 uS x 1000 uS	Maximum Power Dissipation (W)
RJS 100	-R	100mA	600V	17	2.5	0.09	0.11	6	0.41
RJS 125	-R	125mA	600V	11	2.1	0.13	0.17	8	0.43
RJS 160	-R	160mA	600V	7	1.8	0.21	0.26	10	0.46
RJS 200	-R	200mA	600V	4.8	1.5	0.33	0.41	13	0.49
RJS 250	-R	250mA	600V	3.2	1.3	0.51	0.64	16	0.53
RJS 300	-R	300mA	600V	2.1	1.1	0.80	1.00	20	0.56
RJS 350	-R	350mA	600V	1.7	1.0	1.0	1.3	24	0.58
RJS 400	-R	400mA	600V	1.4	0.9	1.2	1.6	29	0.60
RJS 500	-R	500mA	600V	0.9	0.78	1.9	2.4	36	0.64
RJS 600	-R	600mA	600V	0.6	0.66	3.0	3.8	46	0.68
RJS 700	-R	700mA	600V	0.49	0.61	3.8	4.8	54	0.70
RJS 750	-R	750mA	600V	0.44	0.58	4.3	5.5	58	0.71
RJS 1	-R	1A	600V	0.26	0.47	7.4	9.3	80	0.77
RJS 1.25	-R	1.25A	600V	0.17	0.40	12	15	100	0.82
RJS 1.5	-R	1.5A	600V	0.13	0.35	17	21	120	0.86
RJS 2	-R	2A	600V	0.08	0.29	28	36	155	0.93
RJS 2.5	-R	2.5A	600V	0.05	0.24	44	56	190	0.99
RJS 3	-R	3A	600V	0.033	0.20	69	87	230	1.06
RJS 4	-R	4A	600V	0.022	0.17	108	136	300	1.13
RJS 5	-R	5A	600V	0.015	0.15	169	212	370	1.20

Consult manufacturer for other ratings

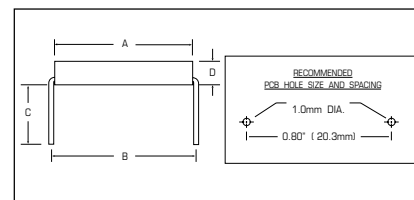
### Power Cross (Telecom) Rating (Fuse Rated 0.1 - 1.5A)

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

### Double - exponential Impulse Waveform



	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)



### Physical Specification

#### Materials

Body: Glass  
Lead Wire: Tin plated Copper, Diameter 0.032"

#### Marking

On fuse: "bel", "Type", "Current Rating", "Voltage Rating", "Appropriate Safety Logos", "✓" (RoHS Version)  
On label: "bel", "RJS", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "R" for RoHS Version

#### Packaging

In bulk : 2,000 pcs per box. (standard Lead) 500 pcs per box. (short Lead)

ORDERING INFORMATION SEE LAST 2 PAGES

Specifications subject to change without notice

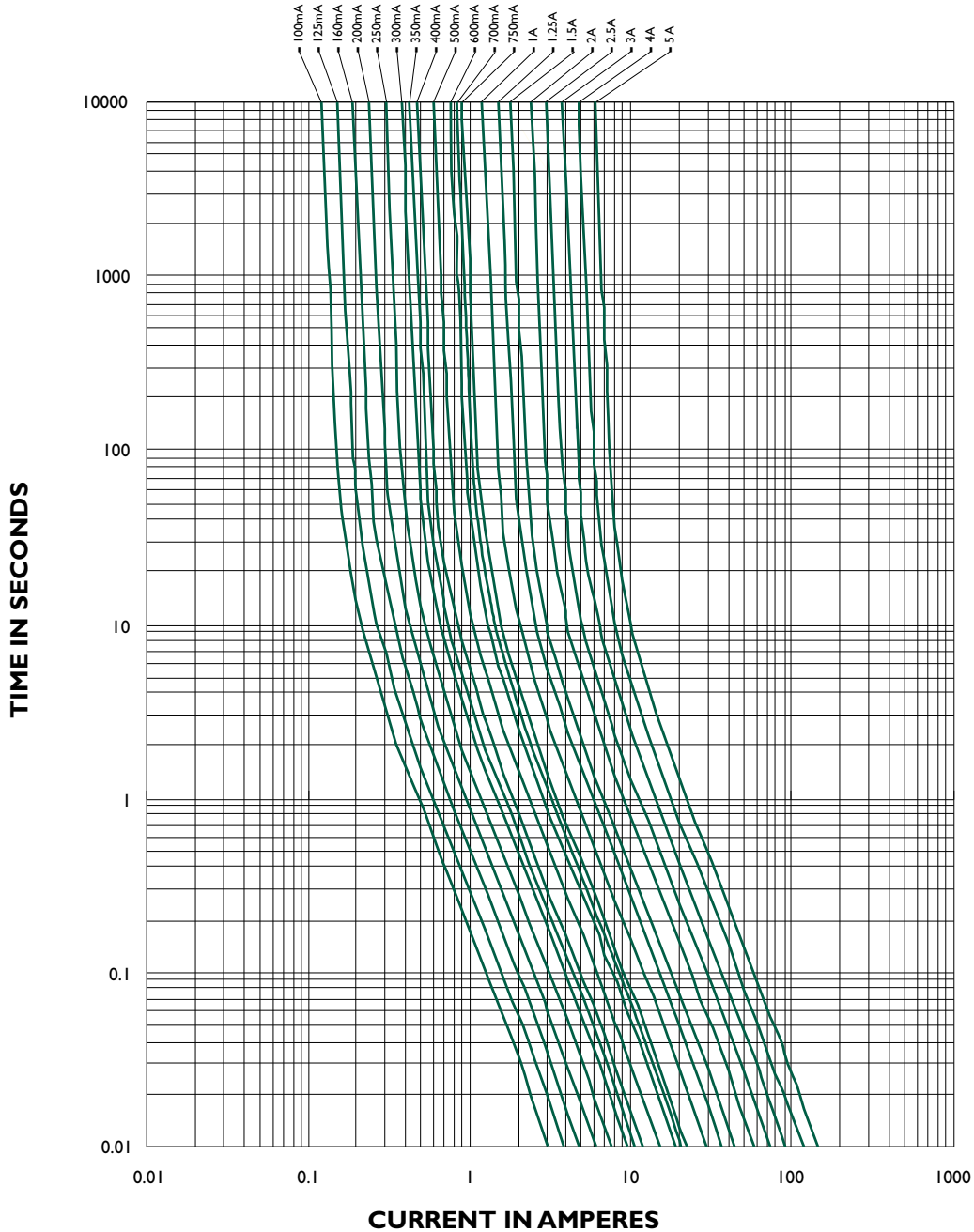
# Type RJS

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RJSC1105

## RJS - TIME CURRENT CHARACTERISTIC CURVE



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NOTE - see important information under "User Guide" on P.08

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