Type MJS

Lightning Surge Withstand Fuse

HF Pb MJS Series, 5x15mm Glass Tube Lightning Surge Withstand Fuse — RoHS 6 Compliant

Description

MJS fuses have been used for Tip and Ring protection in telecommunication circuits. And they continue to be used in legacy designs. However, with advent of new issues of IEC/UL 60950 and Telcordia GR-1089 (Issue 3). MJS fuses may no longer meet all test requirements, depending on the end product circuit design. It is recommended that Types RJS and SMP be evaluated for all new telecommunication applications.

Features

- Meet UL and CSA standard 248-14
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS 6 compliant
- Halogent Free
- Leadfree

Applications

Provide individual protection for components or internal circuits.
- Power supplies
- Battery charger
- Monitor
- Adapter
- Telecom protection

LEAD FREE = Pb
HALOGEN FREE = HF

Physical Specifications

Materials	Body : Glass
	Cap : Nickel Plated Brass Caps
	Leads : Matte Tin Plated Copper, Diameter 0.032''
Marking	On Fuse :
	"bel", "MJS", "Current Rating", "Voltage Rating",
	"Appropriate Safety Logos", " ✔ "(RoHS 6 compliant)
	On Label :
	"bel", "MJS", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and " ", " e "(China RoHS compliant).

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	VOLTAGE RATING (V)	AMPERE RANGE / VOLT @ I.R. ABILITY*
c UL us	E20624	100mA - 7A / 250V AC	100mA - 7A / 125V AC @ 10,000A
SP	LR39772		100mA - 7A / 250V AC @ 200A
PS E	JET 1037-31003-1011		1A - 5A / 125V AC @ 500A
* I.R. = INTERRUPTING RATING = SHORT CIRCUIT RATING (AMPS)			

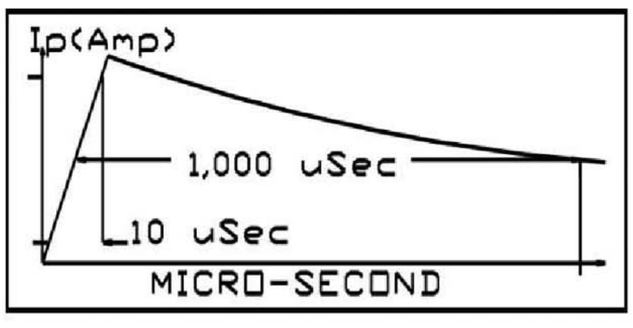

FIG A

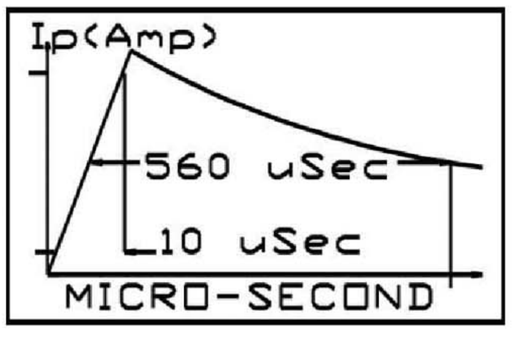

FIG B

Specifications subject to change without notice

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Environmental Specifications

Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (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 ^{O}C,10+/-1 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65 ^{O}C to +125 ^{O}C)
Operating Temperature	-55 ^{O}C to +125 ^{O}C
Terminal Strength	IEC-68-2-21

Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Melting I^2T <10m Sec (A^2 Sec)	Melting I^2T @10 In (A^2 Sec)	Peak Surage Current (Amp) (Fig A) 25 Pulses 10uS x 1000uS	Peak Surage Current (Amp) (Fig B) 50 Pulses 10uS x 560uS	Maximum Power Dissipation (W)	Agency Approvals		
MJS 100-R	100mA	12.5	1.88		0.068	0.088	4.5	6.0	0.22	Y	Y	
MJS 125-R	125mA	7.8	1.44		0.107	0.138	5.6	7.5	0.24	Y	Y	
MJS 150-R	150mA	5.3	1.17		0.167	0.216	6.8	9	0.27	Y	Y	
MJS 200-R	200mA	3.7	1.02		0.26	0.34	9	12	0.30	Y	Y	

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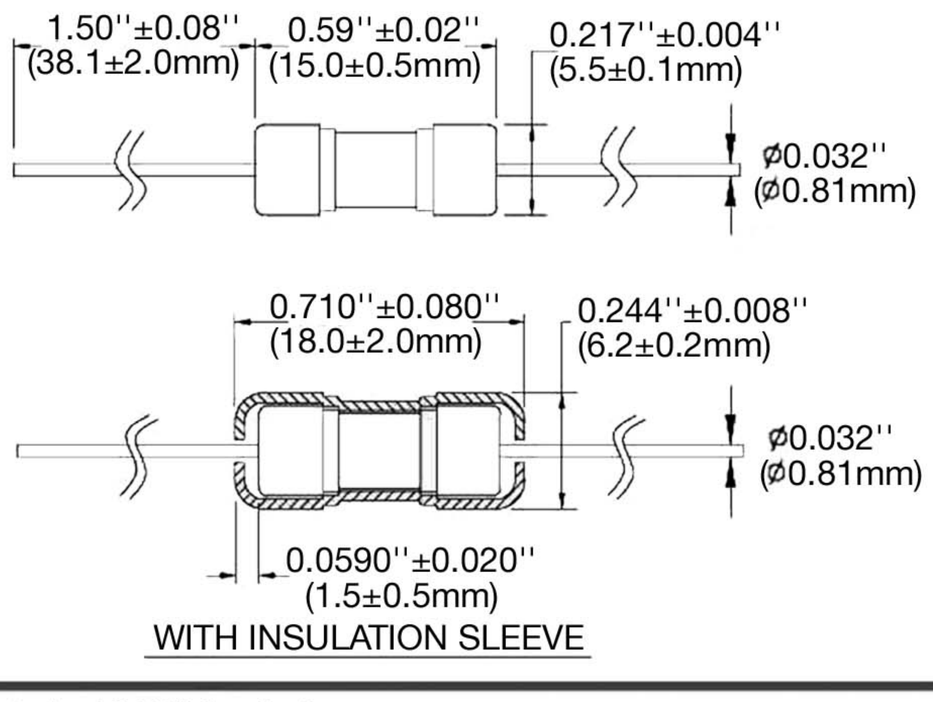
Fuse FGNO Explanation
06XX X [XXXX] X XX, [XXXX]=Ampere Rating

Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
1/32	0.032	32	0032
1/25	.040	40	0040
1/20	.050	50	0050
1/16	.063	63	0063
8/100	.080	80	0080
1/10	.100	100	0100
1/8	.125	125	0125
15/100	.150	150	0150
	.160	160	0160
2/10	.200	200	0200
1/4	.250	250	0250
3/10	.300	300	0300
	.315	315	0315
3/8	.375	375	0375
4/10	.400	400	0400
1/2	.500	500	0500
6/10	.600	600	0600
	.630	630	0630
7/10	.700	700	0700
3/4	.750	750	0750
8/10	.800	800	0800

Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
1-1/2	1.50	1.5	1500
	1.60	1.6	1600
	2.0	2	2000
2-1/4	2.25	2.25	2250
2-1/2	2.5	2.5	2500
	3.0	3	3000
	3.15	3.15	3150
3-1/2	3.5	3.5	3500
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	6.3	6.3	6300
	7.0	7	7000
7-1/2	7.5	7.5	7500
	8.0	8	8000
		10	9100
		12	9120
		15	9150
		20	9200
		25	9250
		30	9300

Mechanical Dimensions



*Diameter lead 0.032'' for all ratings

Ordering Information

0653 R XXXX - X X

FUSE TYPE
0653

R = RoHS Compliant

AMPERE RATING
Refer to fuse FGNO explanation table

MECHANICAL CODE
1 = Standard Axial Lead Pigtail
4 = With VW Insulation Sleeve

PACKAGING CODE
1 = Bulk, 500 / box
2 = T&R, 1500 / reel

Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk (Pigtail Type)	N/A	500	11	N/A
Bulk (Pigtail Type) with Insulation Sleeve	N/A	500	41	N/A
Tape & Reel, 10 mm Pitch	EIA-296-F	1500	12	53
Tape & Reel with Insulation Sleeve , 10 mm Pitch	EIA-296-F	1500	42	53

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