

Description

Sub-miniature, time lag type, 250V rated fuses designed, approved and complied with IEC 60127-3, standard sheet 4.

Electrical Characteristics (IEC-127-3 STANDARD SHEET 4)

Rated Current	1.5 In	2.1 In	2.75 In		4 In		10 In	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
80mA to 6.3A inclusive	1 hr.	2 min.	400 ms	10 sec	150 ms	3 sec	20 ms	150 ms

In clause 9.2, the test voltage for MRT ratings from 80mA to 6.3A is 64VDC.

Features

- Time lag (250VAC)
- Meet IEC standard 60127-3, Sheet 4
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS6 compliant
- Halogen Free
- Leadfree

Applications

Provide individual protection for components or internal circuits.

- Power Supplies
- Battery chargers
- Consumer Electronics
- Adapter
- Industrial Controllers

LEAD FREE =

HALOGEN FREE =

Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	AMPERE RANGE / VOLT @ I.R. ABILITY
	1410133, 917227, 1410139	80mA to 6.3A / 250V ac @ 35A or 10 In whichever is greater.
	139937	80mA to 800mA / 250V ac @ 35A 1A to 4A / 250V ac @ 100A
	40001000	5A to 6.3A / 250V ac @ 100A
	E20624	80mA to 6.3A / 277V ac @ 100A
	LR39772	80mA to 6.3A / 250V ac @ 50A
	JET 1037-31007-1001	1A to 5A / 250V ac @ 100A
	2002010207021532	80mA to 6.3A / 250V ac @ 35A or 10 In whichever is greater.
		50mA - 6.3A / 350V AC @ 100A

Specifications Subject to change without notice.

Physical Specifications

Materials	Base and Cover : Black thermoplastic, UL 94-V0
	Pins: 100% Matte Tin Plated Copper
Marking	On Fuse:
	"bel", "T", Current Rating, "250V", & "Appropriate Safety Logos"
	On label:
	"bel", "MRT", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and ," "(China RoHS compliant).

Type MRT

Time Lag Radial Lead Micro Fuse Series

RoHS 6 Compliant



MRT Oct2014D

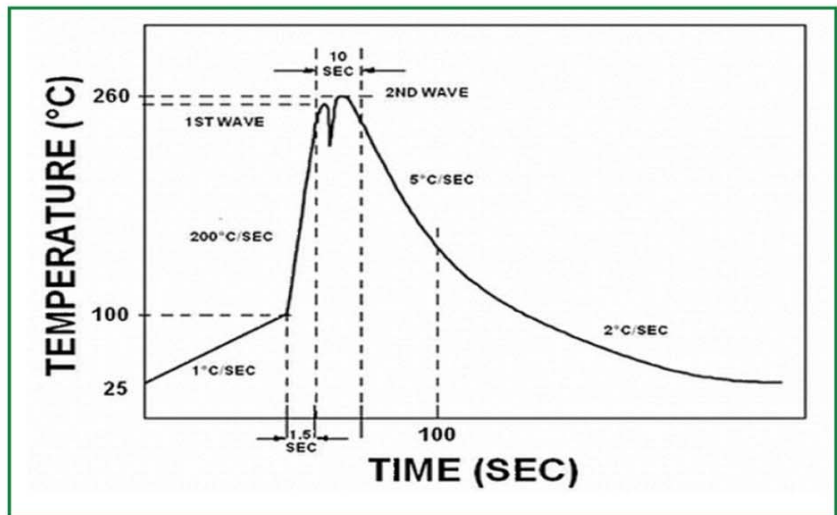
Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) max.	Voltage Rating (V)	Interrupting Rating	Melting I ² T <10mSec (A ² Sec)	Melting I ² T @10 In (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals							
									UL US	CSA	S	D.E.	VDE	CCC	PS E	CE
MRT 80	80mA	3.5	0.398	250	80mA - 6.3A / 250V AC @ 35A or 10 In whichever is greater	0.01	0.01	0.10	Y	Y	Y	Y		Y		Y
MRT 100	100mA	2.3	0.329	250		0.02	0.02	0.11	Y	Y	Y	Y		Y		Y
MRT 125	125mA	1.6	0.295	250		0.04	0.04	0.13	Y	Y	Y	Y		Y		Y
MRT 160	160mA	1.1	0.252	250		0.07	0.06	0.15	Y	Y	Y	Y		Y		Y
MRT 200	200mA	0.73	0.200	250		0.12	0.11	0.17	Y	Y	Y	Y		Y		Y
MRT 250	250mA	0.55	0.188	250		0.38	0.41	0.19	Y	Y	Y	Y		Y		Y
MRT 315	315mA	0.36	0.152	250		0.6	0.66	0.22	Y	Y	Y	Y		Y		Y
MRT 400	400mA	0.25	0.129	250		0.90	1.0	0.25	Y	Y	Y	Y		Y		Y
MRT 500	500mA	0.18	0.114	250		1.5	1.7	0.29	Y	Y	Y	Y		Y		Y
MRT 630	630mA	0.13	0.109	250		2.4	2.6	0.33	Y	Y	Y	Y		Y		Y
MRT 800	800mA	0.095	0.103	250		3.7	4.2	0.38	Y	Y	Y	Y		Y		Y
MRT 1	1A	0.070	0.090	250		6	7	0.44	Y	Y	Y	Y		Y		Y
MRT 1.25	1.25A	0.053	0.087	250		9	11	0.51	Y	Y	Y	Y		Y		Y
MRT 1.6	1.6A	0.038	0.085	250		15	17	0.58	Y	Y	Y	Y		Y	Y	Y
MRT 2	2A	0.029	0.084	250		23	27	0.67	Y	Y	Y	Y		Y	Y	Y
MRT 2.5	2.5A	0.022	0.084	250		37	43	0.77	Y	Y	Y	Y		Y	Y	Y
MRT 3.15	3.15A	0.017	0.074	250		58	69	0.88	Y	Y	Y	Y		Y	Y	Y
MRT 4	4A	0.013	0.073	250		92	110	1.02	Y	Y	Y	Y		Y	Y	Y
MRT 5	5A	0.010	0.073	250		145	175	1.17	Y	Y	Y		Y	Y	Y	Y
MRT 6.3	6.3A	0.008	0.072	250		230	281	1.34	Y	Y	Y		Y	Y		Y

Consult manufacturer for other ratings

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 MRT
Time Lag Radial Lead Fuse Series

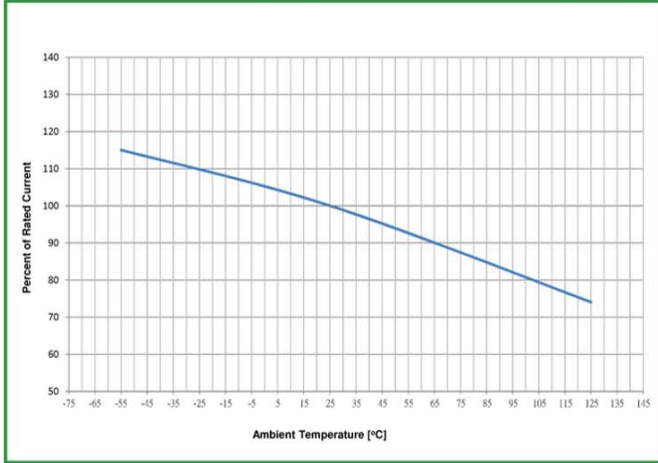
RoHS 6 Compliant



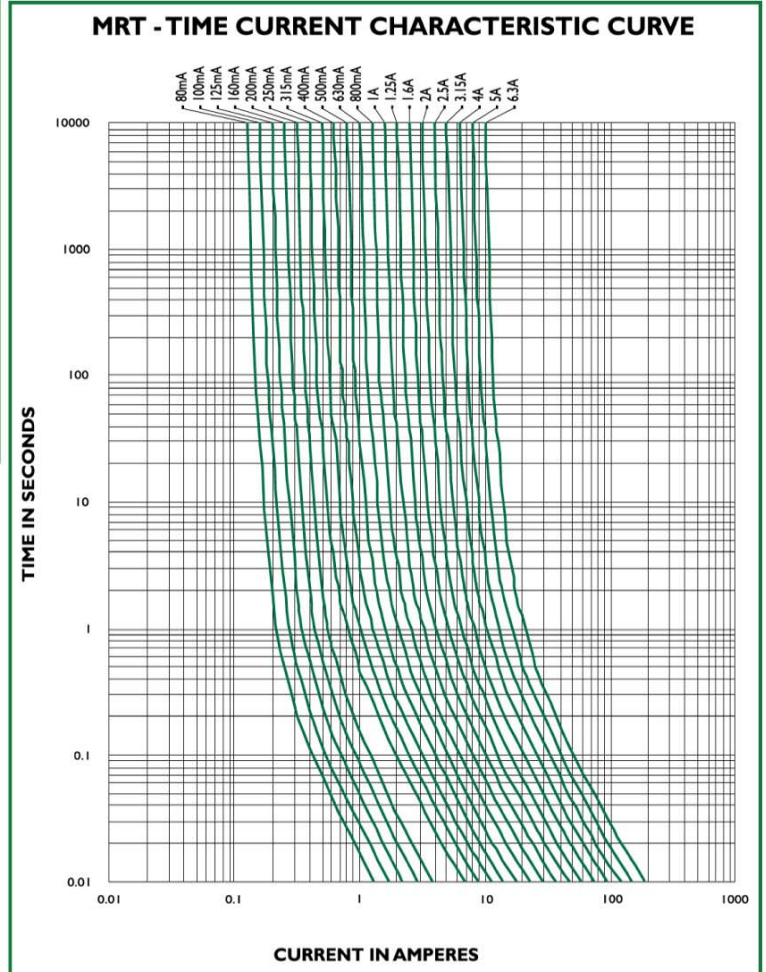
MRT Oct2014C



Temperature Derating Curve



Average Time Current Curve



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 X 3 axis / no load).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test condition B (48 hrs).
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G Method 210F, Test Condition C. Top Side, (260°C, 20 sec)
Moisture Resistance	MIL-STD-202G, Method 202G, Method 106G
Operating Temperature	-55°C to +125°C

Type MRT

Time Lag Radial Lead Micro Fuse Series



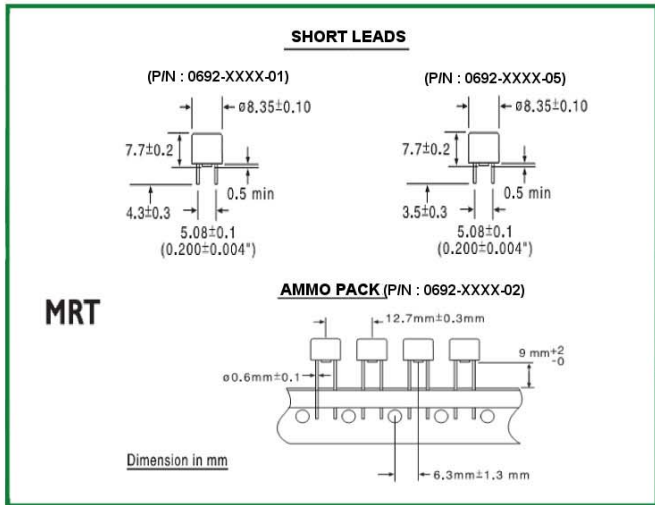
Fuse FGNO Explanation

06XX-[XXXX]-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

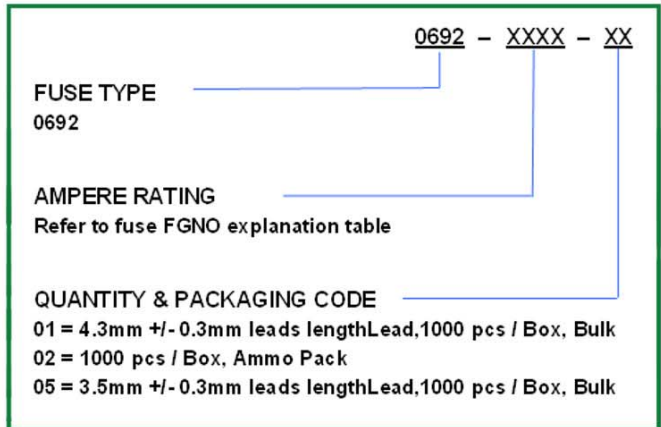
Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
1-1/2	1.50	1.5	1500
	1.60	1.6	1600
	2.0	2	2000
2-1/4	2.25	2.25	2250
2-1/2	2.5	2.5	2500
	3.0	3	3000
	3.15	3.15	3150
3-1/2	3.5	3.5	3500
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	6.3	6.3	6300
	7.0	7	7000
7-1/2	7.5	7.5	7500
	8.0	8	8000
		10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

Mechanical Dimensions



Specifications subject to change without notice.

Ordering Information



Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code
Bulk / bag, 1000 / box	N/A	1000	01_05
12.7 mm pitch, On Tape / box	IEC-286-2	1000	02

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