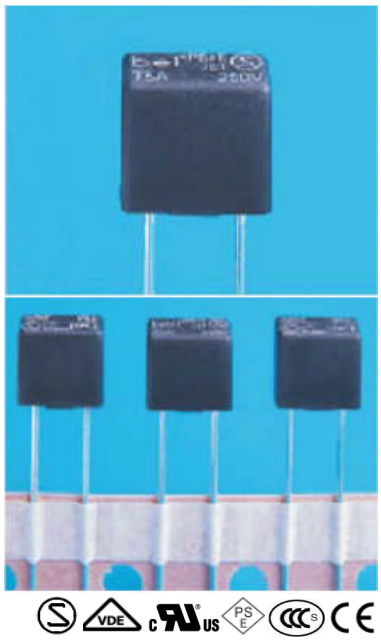
Type RST

Time Lag Radial Lead Micro Fuse Series

RST Series — RoHS 2 Compliant



Description

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

Features

- Time lag (250V AC)
- Meet IEC standard 60127-3, sheet 4
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS 2 compliant
- Halogen Free
- Lead Free

Applications

Provide individual protection for components or internal circuits.

- Power supplies
- Battery chargers
- Consumer electronics
- Adapter
- Industrial controllers

LEAD FREE =
HALOGEN FREE = HF

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", "RST", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and " ", " "(China RoHS compliant).

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

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

In clause 9.2, the test voltage for RST ratings from 80mA to 6.3A is 63VDC.

Safety Agency Approvals

Safety Agency	Safety Agency Certificate	Voltage Rating (V)	Ampere Range / Volt @ I.R. ability*
	1808557	80mA-6.3A/ 250V AC	80mA-5A/250V AC @ 35A or 10 In whichever is greater.
VDE	40011144 40028321		80mA-6.3A/250V AC @ 35A or 10 In whichever is greater.
c UL us	E20624		80mA-6.3A/277V AC @ 100A
PS E	JET 1037-31007-1001		1A-5A 250V AC @ 100A
CCC	2004010207111444		80mA-5A/250V AC @ 35A or 10 In whichever is greater.
*I.R.= Interrupting Rating = Short Circuit Rating(Amps)			

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 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℃,20 sec)
Moisture Resistance	MIL-STD-202G, Method 202G, Method 106G
Operating Temperature	-55℃ to +125℃

Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohms)	Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Melting I²T <10 mSec (A² Sec)	Melting I²T @10 In (A² Sec)	Maximum Power Dissipation (W)	Agency Approvals				
RST 80	80mA	3.5	0.398	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.01	0.01	0.10	Y	Y	Y		Y
RST 100	100mA	2.3	0.329		0.02	0.02	0.11	Y	Y	Y		Y
RST 125	125mA	1.6	0.295		0.04	0.04	0.13	Y	Y	Y		Y
RST 160	160mA	1.1	0.252		0.07	0.06	0.15	Y	Y	Y		Y
RST 200	200mA	0.73	0.200		0.12	0.11	0.17	Y	Y	Y		Y
RST 250	250mA	0.55	0.188		0.38	0.41	0.19	Y	Y	Y		Y
RST 315	315mA	0.36	0.152		0.60	0.66	0.22	Y	Y	Y		Y
RST 400	400mA	0.25	0.129		0.9	1.0	0.25	Y	Y	Y		Y
RST 500	500mA	0.18	0.114		1.5	1.7	0.29	Y	Y	Y		Y
RST 630	630mA	0.13	0.109		2.4	2.6	0.33	Y	Y	Y		Y
RST 800	800mA	0.095	0.103		3.7	4.2	0.38	Y	Y	Y		Y
RST 1	1A	0.070	0.090		6	7	0.44	Y	Y	Y	Y	Y
RST 1.25	1.25A	0.053	0.087		9	11	0.51	Y	Y	Y	Y	Y
RST 1.6	1.6A	0.038	0.085		15	17	0.58	Y	Y	Y	Y	Y
RST 2	2A	0.029	0.084		23	27	0.67	Y	Y	Y	Y	Y
RST 2.5	2.5A	0.022	0.084		37	43	0.77	Y	Y	Y	Y	Y
RST 3.15	3.15A	0.017	0.074		58	69	0.88	Y	Y	Y	Y	Y
RST 4	4A	0.013	0.073		92	110	1.02	Y	Y	Y	Y	Y
RST 5	5A	0.010	0.073		145	175	1.17	Y	Y	Y	Y	Y
RST 6.3	6.3A	0.008	0.072		230	281	1.34	Y		Y		

Consult manufacturer for other ratings

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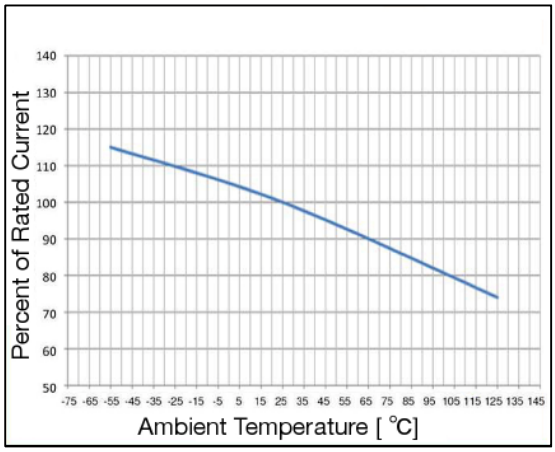
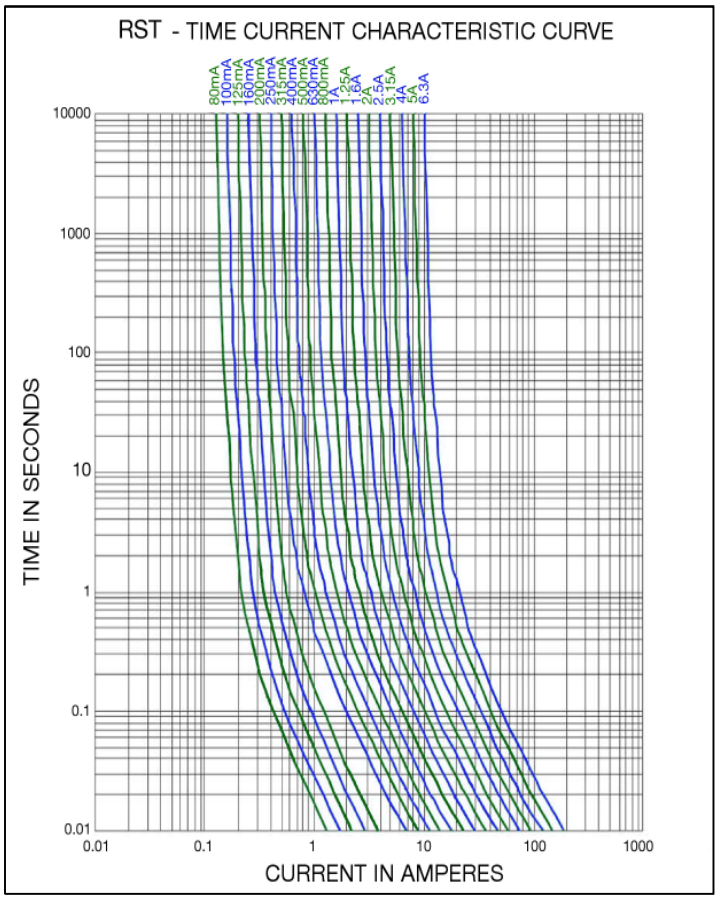
Temperature Derating Curve

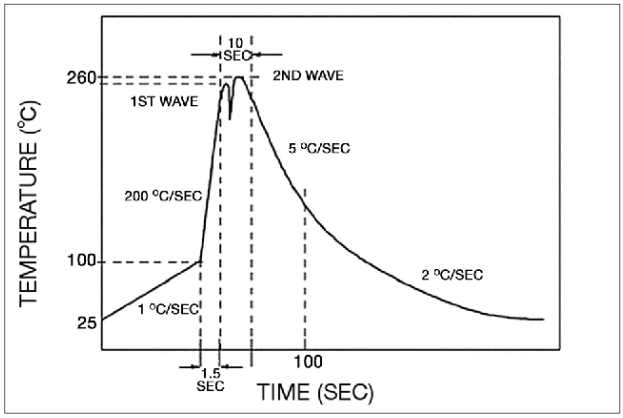


Average Time Current Curve



Soldering Parameters

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



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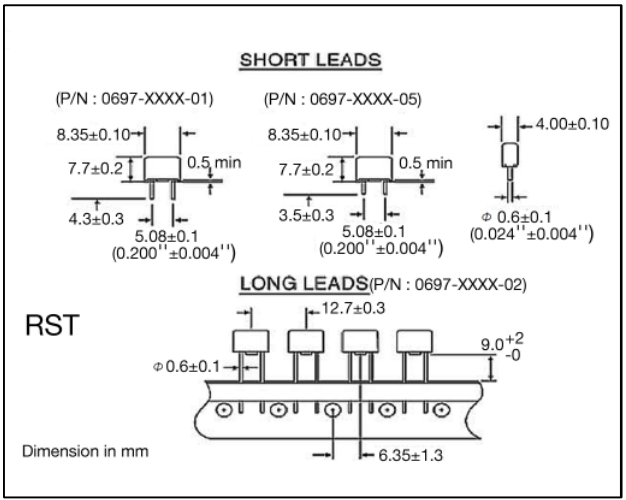
Fuse FGNO Explanation
0697 - [XXXX] X XX
0697=RST; [XXXX]=Ampere Rating; XX=See Ordering Information as below

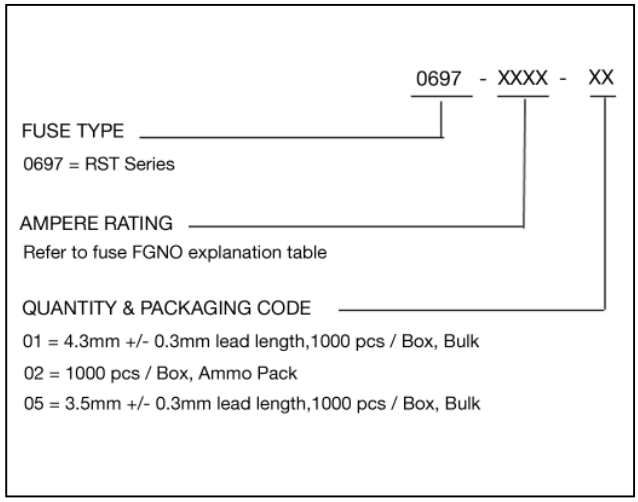
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
8/100	0.080	80	0080
1/10	.100	100	0100
1/8	.125	125	0125
	.160	160	0160
2/10	.200	200	0200
1/4	.250	250	0250
	.315	315	0315
4/10	.400	400	0400
1/2	.500	500	0500
	.630	630	0630
8/10	.800	800	0800

Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
	1.60	1.6	1600
	2.0	2	2000
2-1/2	2.5	2.5	2500
	3.15	3.15	3150
	4.0	4	4000
	5.0	5	5000
	6.3	6.3	6300

Mechanical Dimensions



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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