



**THE DATASHEET OF
POE51Q-12ED**



EOL-Last Buy Date is August 31,2024
 The replacement series is the OHAAL(OHAALxxxx-xx)
 No replacement for the RST 80mA through 800mA

Type RST

Time Lag Radial Lead Micro Fuse Series

HF (Pb) RST Series

RoHS Compliant

Description

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

Features

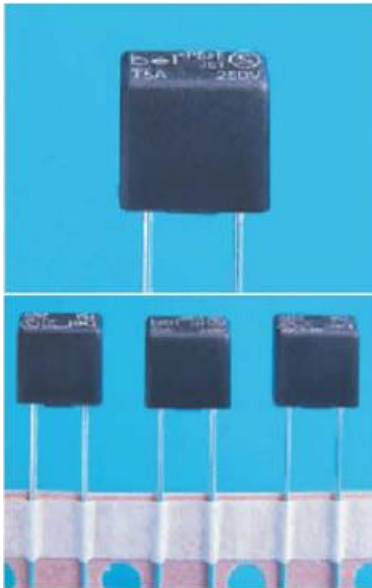
- Time lag (250V AC)
- Meet IEC standard 60127-3, sheet 4
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863
- Halogen Free
- Lead Free

Applications



Provide individual protection for components or internal circuits.

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

LEAD FREE = 
 HALOGEN FREE = 







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

Electrical Characteristics (IEC-127-3 STANDARD SHEET 4) Safety Agency Approvals

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

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

Safety Agency	Safety Agency Certificate	Ampere Rating/ Voltage Rating	Ampere Range / Volt @ I.R. ability*
	1808557	80mA-6.3A/ 250V AC	80mA-5A/250V AC @ 35A or 10 In whichever is greater.
	40011144 40028321		80mA-6.3A/250V AC @ 35A or 10 In whichever is greater.
	E20624		80mA-6.3A/277V AC @ 100A
	Self-declaration No: 2020970207000126		80mA-6.3A/250V AC @ 35A or 10 In whichever is greater.





*I.R.= Interrupting Rating = Short Circuit Rating(Amps)

Type RST

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

Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohms)	Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Melting I ² T <10 mSec (A ² Sec)	Melting I ² T @10 In (A ² 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	
RST 1.25	1.25A	0.053	0.087	9	11	0.51	Y	Y	Y	Y	
RST 1.6	1.6A	0.038	0.085	15	17	0.58	Y	Y	Y	Y	
RST 2	2A	0.029	0.084	23	27	0.67	Y	Y	Y	Y	
RST 2.5	2.5A	0.022	0.084	37	43	0.77	Y	Y	Y	Y	
RST 3.15	3.15A	0.017	0.074	58	69	0.88	Y	Y	Y	Y	
RST 4	4A	0.013	0.073	92	110	1.02	Y	Y	Y	Y	
RST 5	5A	0.010	0.073	145	175	1.17	Y	Y	Y	Y	
RST 6.3	6.3A	0.008	0.072	230	281	1.34	Y		Y	Y	

No replacement for the 80mA - 800mA

The replacement series is the OHAAL

Consult manufacturer for other ratings



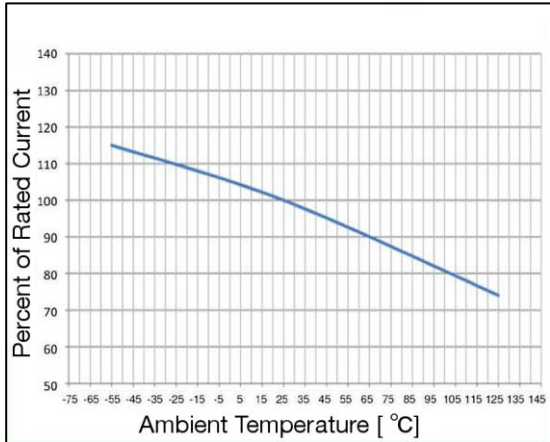
Specifications subject to change without notice

Bel Fuse Inc.
 300 Executive Drive, Suite 300,
 West Orange, NJ 07052 USA

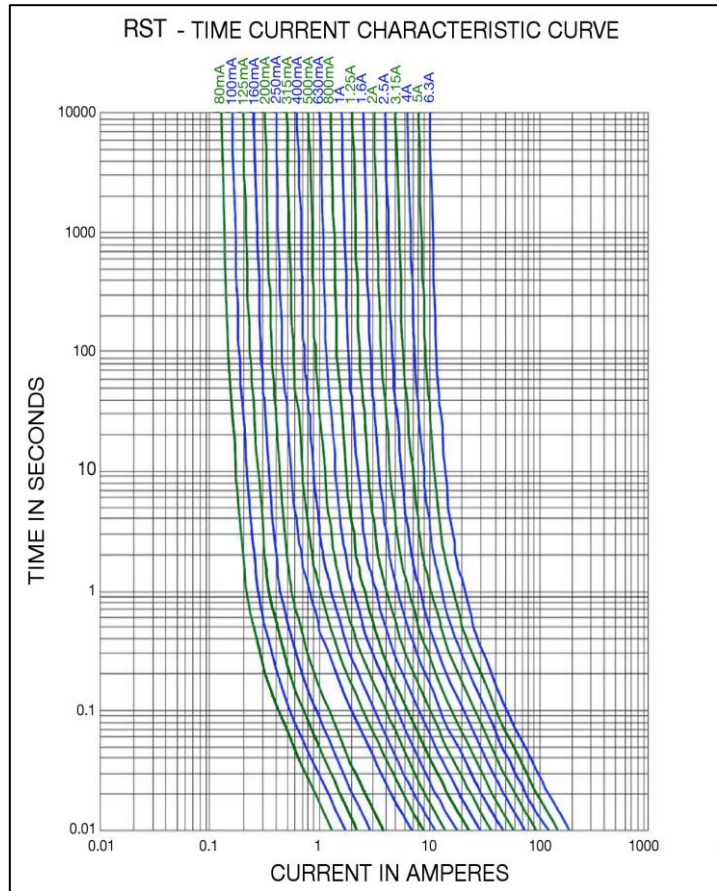
+1 201.432.0463
 Bel.US.CS@belf.com
belfuse.com/circuit-protection

Type RST

Temperature Derating Curve

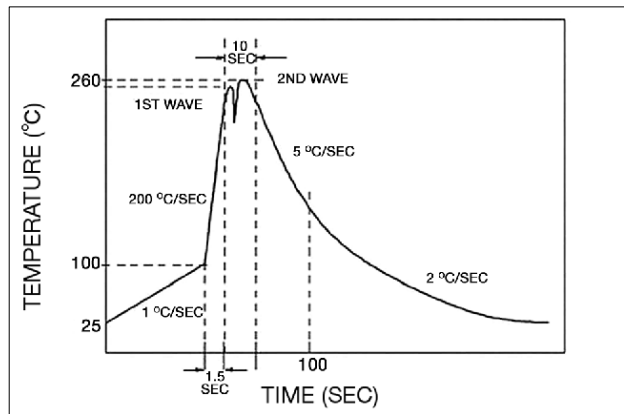


Average Time Current Curve



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 RST

Fuse FGNO Explanation

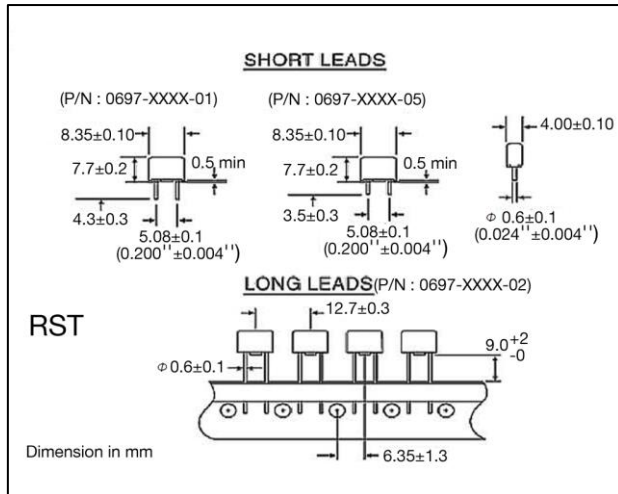
0697 - [XXXX] X XX

0697=RST; [XXXX]=Ampere Rating; XX=See Ordering Information as below

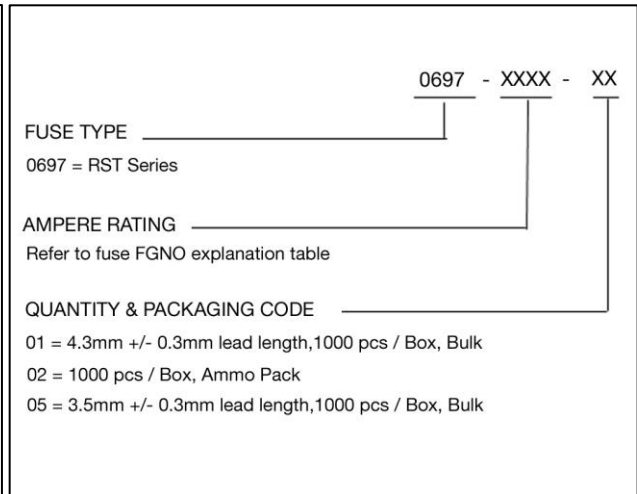
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
8/100	0.080	80	0080
1/10	.100	100	0100
1/8	.125	125	0125
	.160	160	0160
2/10	.200	200	0200
1/4	.250	250	0250
	.315	315	0315
4/10	.400	400	0400
1/2	.500	500	0500
	.630	630	0630
8/10	.800	800	0800

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



Specifications subject to change without notice

Bel Fuse Inc.
300 Executive Drive, Suite 300,
West Orange, NJ 07052 USA

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Looking for pricing, stock, or lifecycle information?

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-  Shortage Management
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