Type 5VT / 5VTP

Time-lag Fuse Series (High Surge-proof, Low Breaking Capacity)

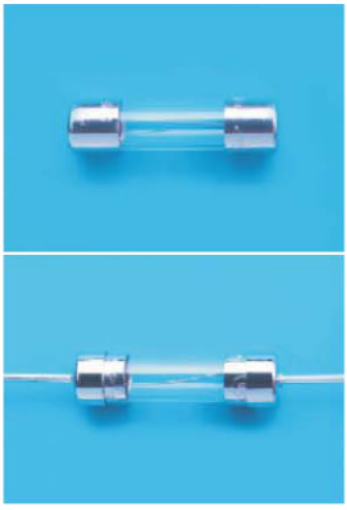
HF Pb 5VT/5VTP Series, 5x20mm Glass Tube Time-lag Fuse — **RoHS 6 Compliant**

Description

5x20mm Time lag fuse, high surge-proof, low breaking capacity, glass tube body cartridge fuse designed, approved and complied with IEC 60127-2, standard sheet 3.

Features

- Meet IEC standard 60127-2, Sheet 3
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS 6 compliant
- Halogen Free
- Leadfree



Applications

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

LEAD FREE = Pb
HALOGEN FREE = HF

Physical Specifications

Materials	Body : Glass
	Cap : Nickel Plated Brass Caps
	Leads : Matte Tin Plated Copper
Marking	On Fuse :
	"bel", "T", "Current Rating", "L","250V",
	"Appropriate Safety Logos","✔"(RoHS 6 compliant)
	On Label :
	"bel","5VT"or"5VTP","Current Rating","Voltage Rating","Interrupting Rating", " Appropriate Safety Logos" and " ", " "(China RoHS compliant).

Electrical Characteristics (IEC-127-2 STANDARD SHEET 3)

Rated Current	1.5 In		2.1 In		2.75 In		4 In		10 In	
	MIN		MAX		MIN	MAX	MIN	MAX	MIN	MAX
1A to 6.3A	1 hr.		2 min.		600 ms	10 sec	150 ms	3 sec	20 ms	300 ms

In clause 9.2, the test voltage for 5VTP ratings from 1A to 6.3A is 63VDC.

Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	VOLTAGE RATING (V)	AMPERE RANGE / VOLT @ I.R. ABILITY*
	1216134	1A - 6.3A / 250V AC	1A - 6.3A / 250V AC @ 35A or 10 In whichever is greater
	40007745		
	E20624		
	LR39772		
	2003010207030341		

* I.R. = INTERRUPTING RATING = SHORT CIRCUIT RATING (AMPS)

Specifications subject to change without notice

bel POWER SOLUTIONS & PROTECTION
a bel group

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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 B (After Opening) 100, 000 ohms minimum.
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G, Method 210F, Test Condition B.(260+/-5 °C,10+/-1 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65 °C to +125 °C).
Operating Temperature	-55 °C to +125 °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 I²T <10 mSec (A² Sec)	Melting I²T @10 In (A² Sec)	Maximum Power Dissipation (W)	Agency Approvals				
								c UL us	SP	CCC	S	VDE
5VT (P) 1-R	1A	0.111	0.15	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	28	29	0.42	Y	Y	Y	Y	Y
5VT (P) 1.25-R	1.25A	0.073	0.13		42	43	0.42	Y	Y	Y	Y	Y
5VT (P) 1.6-R	1.6A	0.058	0.13		62	64	0.51	Y	Y	Y	Y	Y
5VT (P) 2-R	2A	0.039	0.12		92	95	0.61	Y	Y	Y	Y	Y
5VT (P) 2.5-R	2.5A	0.031	0.12		137	142	0.74	Y	Y	Y	Y	Y
5VT (P) 3.15-R	3.15A	0.023	0.10		203	211	0.90	Y	Y	Y	Y	Y
5VT (P) 4-R	4A	0.017	0.10		300	313	1.08	Y	Y	Y	Y	Y
5VT (P) 5-R	5A	0.012	0.09		444	465	1.31	Y	Y	Y	Y	Y
5VT (P) 6.3-R	6.3A	0.010	0.09		658	691	1.58	Y	Y	Y	Y	Y

Consult manufacturer for other ratings

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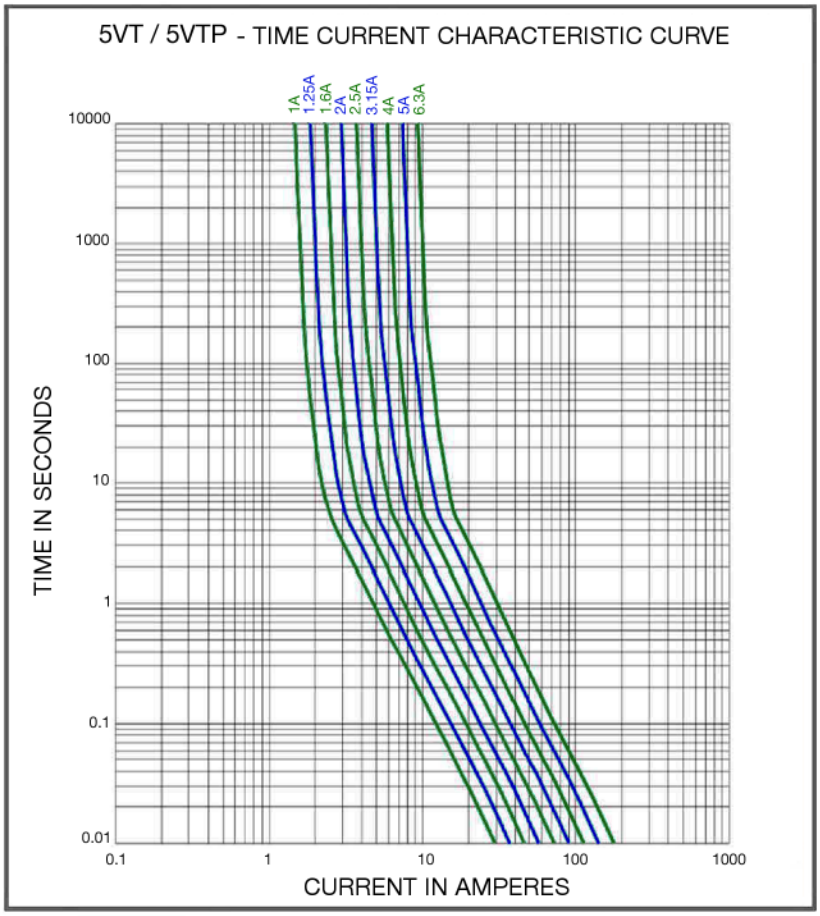
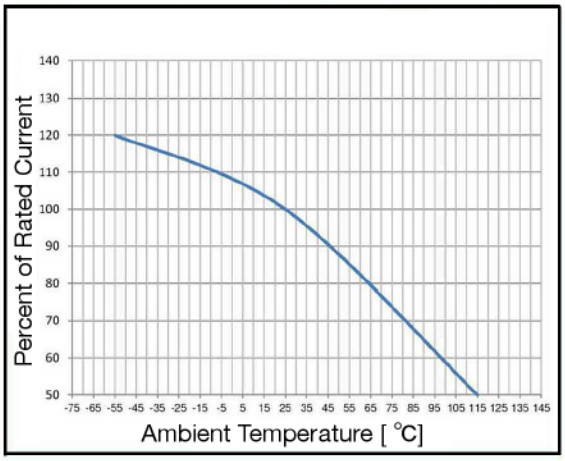
Average Time Current Curve

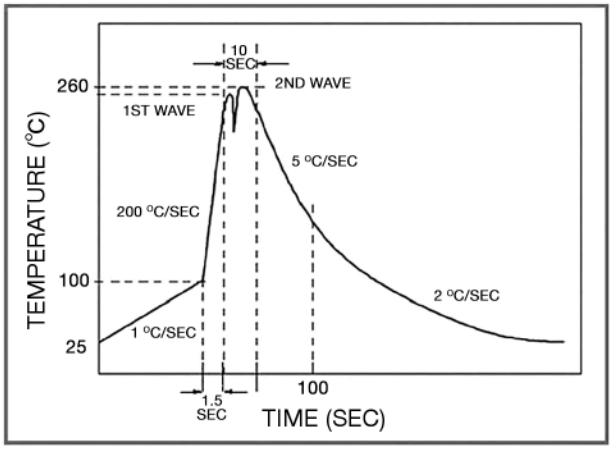


Temperature Derating Curve



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 Tp	260 °C
Time within +0 °C / -5 °C of actual peak temperature	10 seconds
Ramp-down rate	5 °C / second max.



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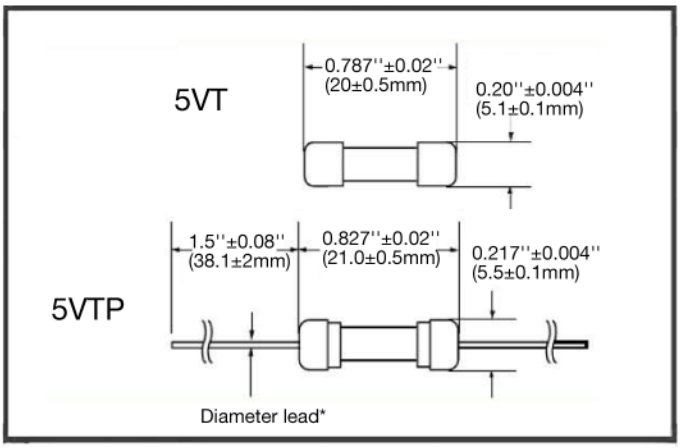
Fuse FGNO Explanation

0654 R [XXXX] - XX

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

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



*Ratings 6.3A and less have 0.032'' diameter lead.

Ordering Information

0654 R XXXX - X X

FUSE TYPE
0654RXXXX-1X = 5VT/5VTP Series

R = RoHS Compliant

AMPERE RATING
Refer to fuse FGNO explanation table

SAFETY STANDARD CODE
1 = IEC, 250V, 1A - 6.3A

PACKAGING CODE
1 = Cartridge version, 1K / box
3 = Pigtail version, 1K bulk pack
6 = Pigtail version, Tape and Reel, 1500 / reel

Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk	N/A	1000	11	N/A
Bulk (Pigtail Type)	N/A	1000	13	N/A
Tape & Reel, 10 mm Pitch	EIA-296-F	1500	16	63

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