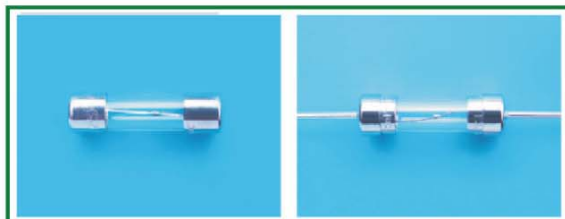


Type 5ST / 5STP

Time-lag Fuse Series (Low Breaking Capacity)

5 x 20mm Glass Tube
RoHS 6 Compliant

HF (Pb) 5ST / 5STP Series, 5 x 20mm Time-lag Fuse



Description

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

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	MIN	MAX
63mA to 100mA	1	2	200	10	40	3	10	300		
125mA to 12.5A	1	2	600	10	150	3	20	300		
	hr.	min.	ms	sec	ms	sec	ms	ms		

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

Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	AMPERE RANGE / VOLT @ I.R.ABILITY
	1021774	63mA - 6.3A / 250V AC @35A or 10 In whichever is greater
	40000507	
	EM231	
	E20624	63mA - 10A / 250V AC @35A or 10 In whichever is greater
		
	LR39772	
	2003010207030316	63mA - 6.3A / 250V AC @35A or 10 In whichever is greater

Specifications subject to change without notice

Features

- Meet IEC standard 60127-2, Sheet 3
- 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 charger
- Monitor
- Adapter

LEAD FREE = 

HALOGEN FREE = 

Type 5ST / 5STP

Time-lag Fuse Series (Low Breaking Capacity)

5 x 20mm Glass Tube
RoHS 6 Compliant
HF Pb

bel

5ST Apr2013D

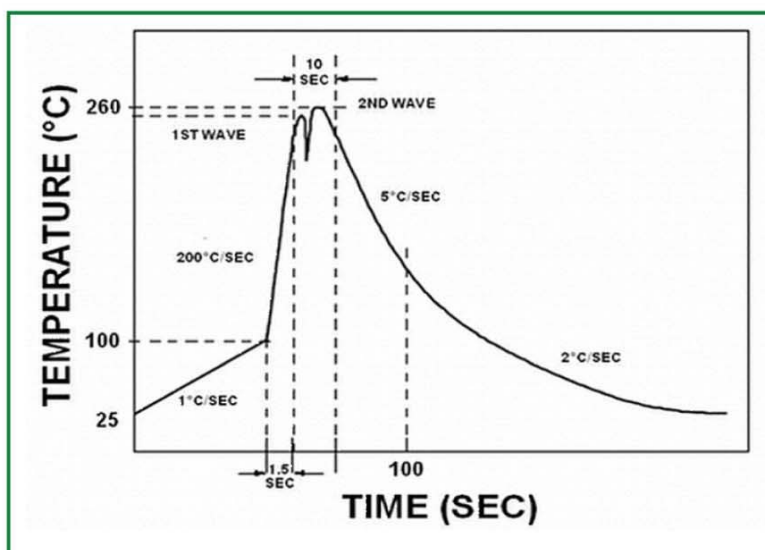
Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) Max.	Voltage Rating (V)	Interrupting Rating	Melting I ₂ T <10 m Sec (A ² Sec)	Melting I ₂ T @ 10 In (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals						
									UL	CSA	CCC	S	DVE	Y	CE
5ST (P) 63-R	63mA	19.5	1.90	250	250V AC @35A or 10 In whichever is greater	0.008	0.021	0.28	Y	Y	Y	Y	Y	Y	Y
5ST (P) 80-R	80mA	13.2	1.58	250		0.015	0.036	0.29	Y	Y	Y	Y	Y	Y	Y
5ST (P) 100-R	100mA	11.0	1.63	250		0.03	0.06	0.30	Y	Y	Y	Y	Y	Y	Y
5ST (P) 125-R	125mA	7.02	1.29	250		0.05	0.11	0.30	Y	Y	Y	Y	Y	Y	Y
5ST (P) 160-R	160mA	4.10	0.92	250		0.08	0.19	0.31	Y	Y	Y	Y	Y	Y	Y
5ST (P) 200-R	200mA	2.60	0.77	250		0.15	0.33	0.32	Y	Y	Y	Y	Y	Y	Y
5ST (P) 250-R	250mA	1.70	0.64	250		0.26	0.58	0.32	Y	Y	Y	Y	Y	Y	Y
5ST (P) 315-R	315mA	1.30	0.57	250		0.46	1.01	0.33	Y	Y	Y	Y	Y	Y	Y
5ST (P) 400-R	400mA	0.72	0.41	250		0.81	1.76	0.34	Y	Y	Y	Y	Y	Y	Y
5ST (P) 500-R	500mA	0.57	0.47	250		1.4	3.1	0.34	Y	Y	Y	Y	Y	Y	Y
5ST (P) 630-R	630mA	0.18	0.14	250		0.9	1.5	0.18	Y	Y	Y	Y	Y	Y	Y
5ST (P) 800-R	800mA	0.14	0.14	250		1.6	2.5	0.20	Y	Y	Y	Y	Y	Y	Y
5ST (P) 1-R	1A	0.10	0.13	250		2.4	3.3	0.17	Y	Y	Y	Y	Y	Y	Y
5ST (P) 1.25-R	1.25A	0.052	0.08	250		4.1	5.5	0.19	Y	Y	Y	Y	Y	Y	Y
5ST (P) 1.6-R	1.6A	0.036	0.08	250		6.9	8.9	0.23	Y	Y	Y	Y	Y	Y	Y
5ST (P) 2-R	2A	0.028	0.08	250		12	15	0.26	Y	Y	Y	Y	Y	Y	Y
5ST (P) 2.5-R	2.5A	0.023	0.08	250		20	24	0.31	Y	Y	Y	Y	Y	Y	Y
5ST (P) 3.15-R	3.15A	0.017	0.08	250		33	39	0.36	Y	Y	Y	Y	Y	Y	Y
5ST (P) 4-R	4A	0.013	0.07	250		56	64	0.42	Y	Y	Y	Y	Y	Y	Y
5ST (P) 5-R	5A	0.096	0.07	250		95	105	0.49	Y	Y	Y	Y	Y	Y	Y
5ST (P) 6.3-R	6.3A	0.073	0.07	250		160	173	0.57	Y	Y	Y	Y	Y	Y	Y
5ST (P) 8-R	8A	0.062	0.07	250		260	282	0.80	Y	Y					Y
5ST (P) 10-R	10A	0.052	0.07	250		439	461	1.00	Y	Y					Y
5ST (P) 12.5-R	12.5A	0.041	0.07	250	No Safety approvals	490	679	1.70							

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 5ST / 5STP

Time-lag Fuse Series (Low Breaking Capacity)

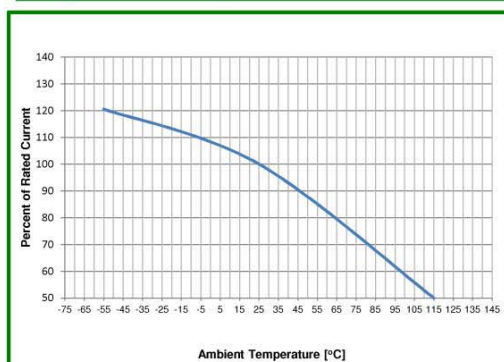
5 x 20mm Glass Tube
RoHS 6 Compliant



bel

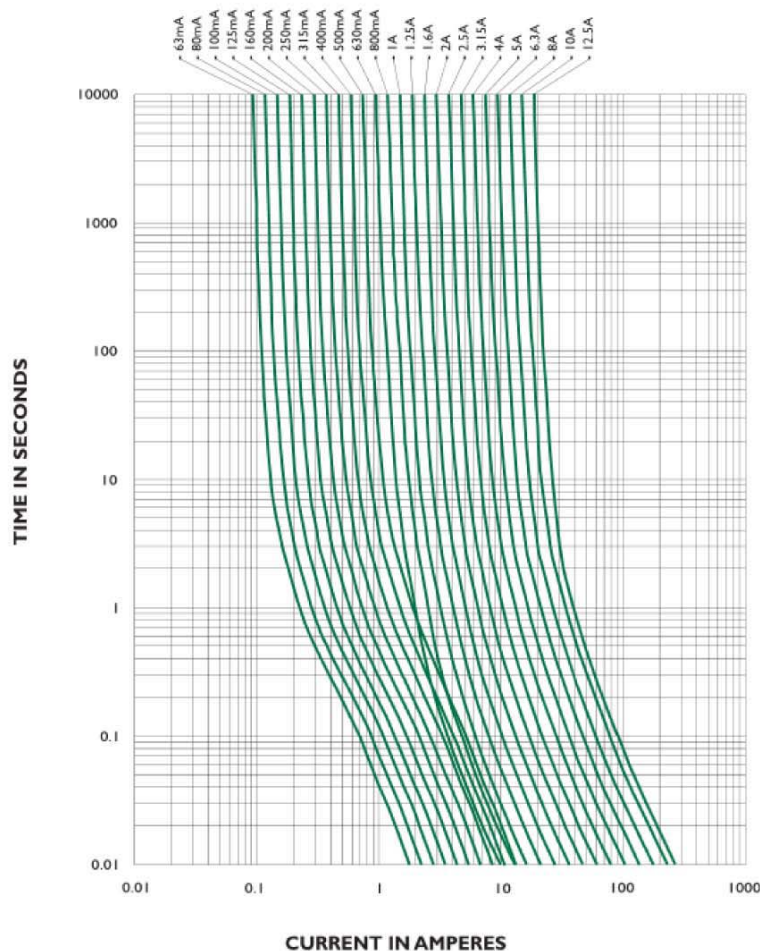
5ST Apr2013C

Temperature Derating Curve



Average Time Current Curve

5ST / 5STP - TIME CURRENT CHARACTERISTIC 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, 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

Type 5ST / 5STP Time-lag Fuse Series (Low Breaking Capacity)

5 x 20mm Glass Tube
RoHS 6 Compliant
HF Pb

bel

5ST Apr2013D

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", "5ST", or "5STP", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "M", "e" (China RoHS compliant).

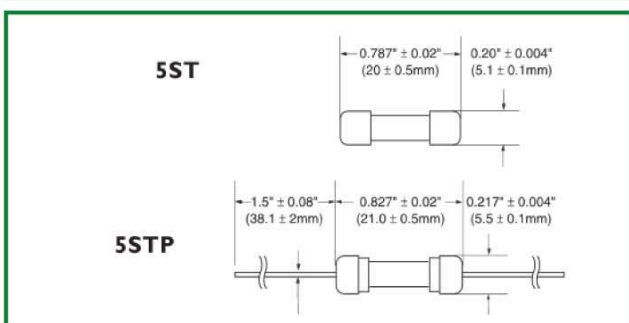
Fuse FGNO Explanation

06XX-XXXX-XX, [XXXX]=Ampere Rating

Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
1/32	.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

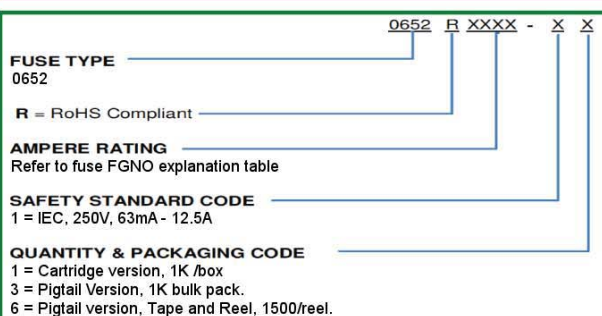
Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
1-1/2	1.50	1.5	1500
	1.60	1.6	1600
	2.0	2	2000
2-1/4	2.25	2.25	2250
2-1/2	2.5	2.5	2500
	3.0	3	3000
	3.15	3.15	3150
3-1/2	3.5	3.5	3500
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	6.3	6.3	6300
	7.0	7	7000
7-1/2	7.5	7.5	7500
	8.0	8	8000
		10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

Mechanical Dimensions



* Ratings 6.3A and less have 0.032" diameter lead;
Ratings 8A and above have 0.040" diameter lead.

Ordering Information



Specifications subject to change without notice

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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