

## Type 5HT / 5HTP

### Time-lag Fuse Series (High - Breaking Capacity)

5 x 20mm Ceramic Tube  
RoHS 6 Compliant

HF 5HT / 5HTP Series, 5 x 20mm Time-Lag Fuse



#### Description

5x20mm Time-Lag surge withstand, high breaking capacity, ceramic body cartridge fuse designed, approved and complied with IEC 60127-2, standard sheet 5.

#### Features

- High breaking capacity (250V ac @1500A)
- Meet IEC standard 60127-2, Sheet 5
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS6 compliant
- Halogen Free
- Leadfree

#### Electrical Characteristics (IEC-127-2 STANDARD SHEET 5)

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
100mA to 3.15A	1	30	1	80	95	5	10	100		
4A and above	1	30	1	80	150	5	20	100		
		hr.		min.		sec		ms		ms

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

#### Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	AMPERE RANGE / VOLT @ I.R.ABILITY
	909875	1A - 6.3A / 250V AC @ 1,500A
	40000505	
	EM232	
	E20624	250mA - 6.3A / 600V AC @150A
		250mA - 10A / 250V AC @1500A
	LR39772	
	JET1037-31003-1008	1A - 5A / 250V AC @ 1,500A
	JET1037-31003-1009	
	JET1037-31003-1006	
	2002010207021531	250mA - 6.3A / 250V AC @1500A

Specifications subject to change without notice

#### Applications

Provide individual protection for components or internal circuits.

- Power Supplies
- Battery charger
- Monitor
- Adapter

LEAD FREE =

HALOGEN FREE =

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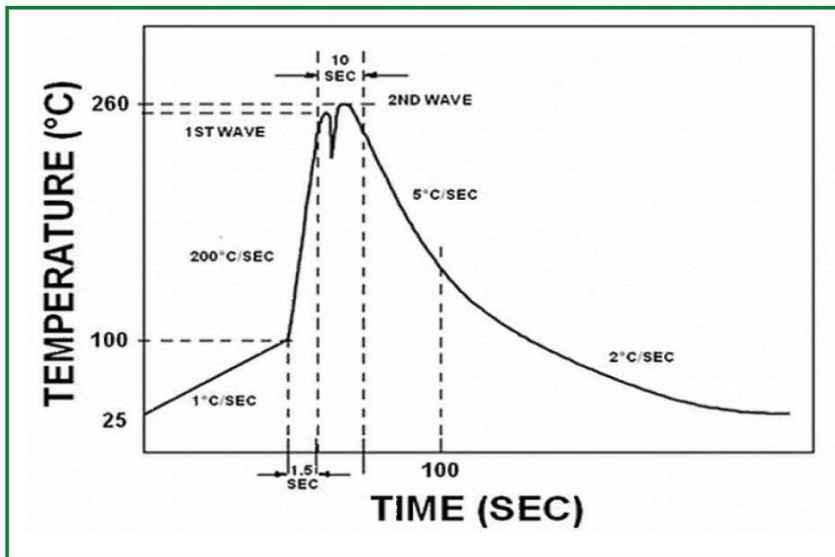
### Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) Max.	Voltage Rating (V)	Interrupting Rating	Melting I <sup>2</sup> T <10 m Sec (A <sup>2</sup> Sec)	Melting I <sup>2</sup> T @ 10 In (A <sup>2</sup> Sec)	Maximum Power Dissipation (W)	Agency Approvals							
									UL US	SP	CCC	S	DVE	PS E	CE	
5HT (P) 250-R	250mA	3.41	1.16	250	1A - 6.3A / 250V AC @ 1,500A  250mA - 6.3A / 600V AC @150A	0.10	0.12	0.34	Y	Y	Y					Y
5HT (P) 315-R	315mA	2.08	0.90	250		0.18	0.22	0.38	Y	Y	Y					Y
5HT (P) 400-R	400mA	1.47	0.73	250		0.28	0.34	0.41	Y	Y	Y					Y
5HT (P) 500-R	500mA	1.03	0.66	250		0.46	0.58	0.48	Y	Y	Y					Y
5HT (P) 630-R	630mA	0.63	0.51	250		0.70	0.90	0.55	Y	Y	Y					Y
5HT (P) 800-R	800mA	0.39	0.40	250		1.1	1.5	0.64	Y	Y	Y					Y
5HT (P) 1-R	1A	0.20	0.25	250		1.7	1.7	0.73	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 1.25-R	1.25A	0.14	0.24	250		3	3	0.81	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 1.6-R	1.6A	0.095	0.19	250		5	6	0.91	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 2-R	2A	0.069	0.17	250		10	11	1.00	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 2.5-R	2.5A	0.047	0.16	250		17	20	1.10	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 3.15-R	3.15A	0.031	0.13	250		31	38	1.20	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 4-R	4A	0.020	0.10	250		56	69	1.40	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 5-R	5A	0.015	0.10	250		101	128	1.50	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 6.3-R	6.3A	0.012	0.10	250		181	237	1.70	Y	Y	Y	Y	Y	Y	Y	Y
5HT (P) 8-R	8A	0.008	0.09	250		330	439	2.70	Y	Y					Y	Y
5HT (P) 10-R	10A	0.007	0.09	250		601	812	2.90	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 <sub>p</sub>	260°C
Time within +0 °C / -5°C of actual peak temperature	10 seconds
Ramp-down rate	5 °C / second max.



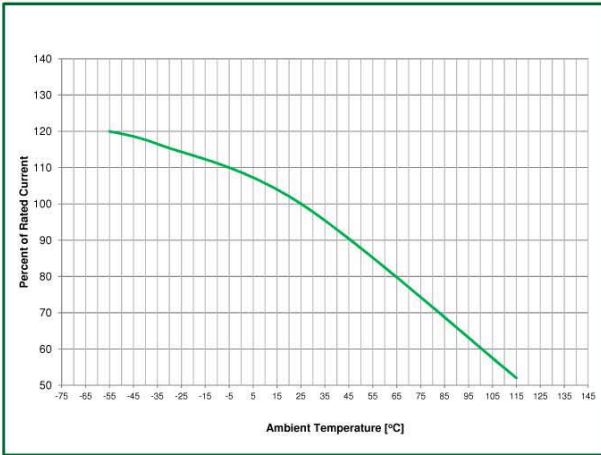
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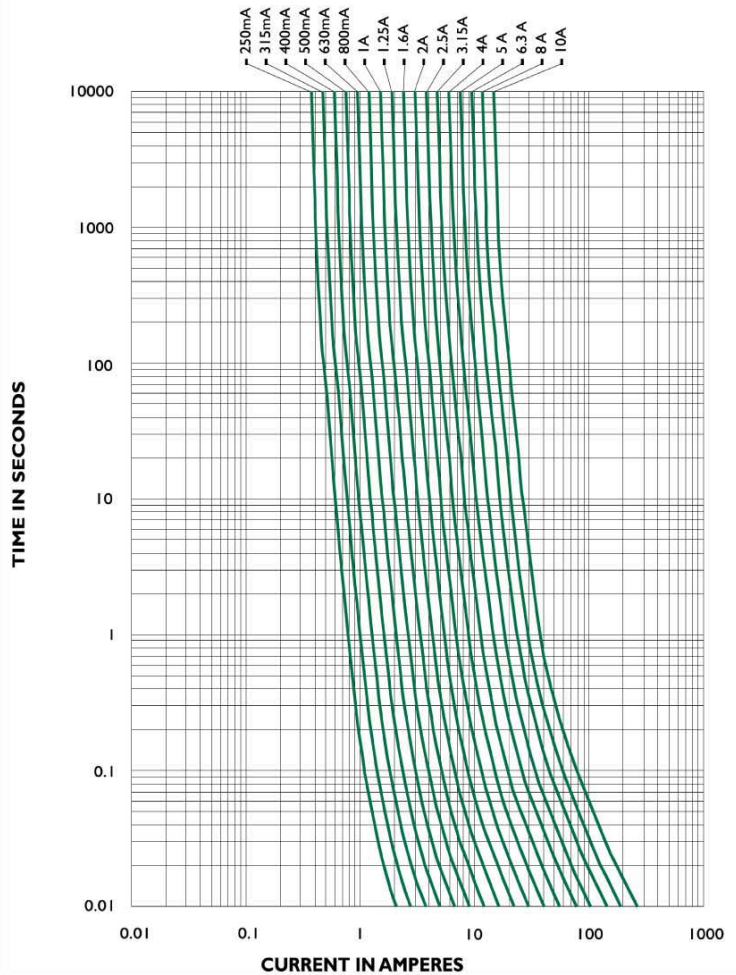
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**Temperature Derating Curve**



**Average Time Current Curve**

**5HT / 5HTP - TIME CURRENT CHARACTERISTIC CURVE**



**Environmental Specifications**

<b>Shock Resistance</b>	MIL-STD-202G, Method 213B, Test Condition I (100 G's peak for 6 milliseconds; Sawtooth Waveform)
<b>Vibration Resistance</b>	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
<b>Salt Spray Resistance</b>	MIL-STD-202G, Method 101E, Test condition B (48 hrs).
<b>Insulation Resistance</b>	MIL-STD-202G, Method 302, Test Condition B (After Opening) 100,000 ohms minimum.
<b>Solderability</b>	MIL-STD-202G, Method 208H
<b>Resistance to solder Heat</b>	MIL-STD-202G Method 210F, Test Condition B. (260+/-5 °C, 10+/-1 sec)
<b>Thermal Shock</b>	MIL-STD-202G, Method 107G, Test Condition B (-65 °C to +125 °C).
<b>Operating Temperature</b>	-55 °C to +125 °C
<b>Terminal Strength</b>	IEC-68-2-21





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**Physical Specifications**

<b>Materials</b>	Body : Ceramic
	Cap : Nickel Plated Brass Caps
	Leads: Matte Tin Plated Copper
<b>Marking</b>	On Fuse:
	"bel" , "T" , " Current Rating","H" , "250V",
	"Appropriate Safety Logos", " ✓ "(RoHS 6 compliant)
	On label:
	"bel" , "5HT", or "5HTP", "Current Rating" , "Voltage Rating" , "Interrupting Rating" , "Appropriate Safety Logos" and " M " , " e "(China RoHS compliant).

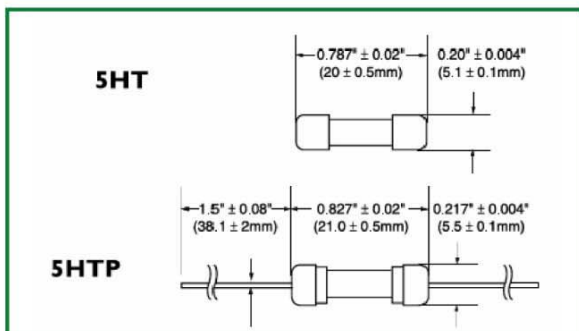
**Fuse FGNO Explanation**

06XX-XXXXJ-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

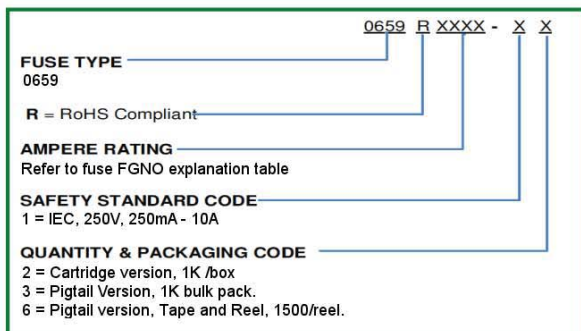
Fraction	Decimal	Amps	Bel FGNO(XXXX)
	1.0	1	1000
1-1/4	1.25	1.25	1250
1-1/2	1.50	1.5	1500
	1.60	1.6	1600
	2.0	2	2000
2-1/4	2.25	2.25	2250
2-1/2	2.5	2.5	2500
	3.0	3	3000
	3.15	3.15	3150
3-1/2	3.5	3.5	3500
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	6.3	6.3	6300
	7.0	7	7000
7-1/2	7.5	7.5	7500
	8.0	8	8000
		10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

**Mechanical Dimensions**



\* 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	12	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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