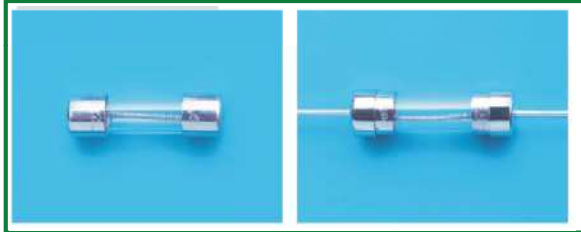


## Type 5ET / 5ETP

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

5 x 20mm Glass Tube  
RoHS 6 Compliant

**HF** **Pb** 5ET / 5ETP Series, 5 x 20mm Time-lag Fuse



### Description

5x20mm Time lag fuse, high surge-proof, enhanced breaking capacity, glass tube body cartridge fuse designed, approved and complied with IEC 60127- 2, standard sheet 6.

### Electrical Characteristics (IEC-127-2 STANDARD SHEET 6)

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
1A to 12A	1	2	600	10	150	3	20	300		
	hr.	min.	ms	sec	ms	sec	ms	ms		

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

### Features

- Meet IEC standard 60127-2, Sheet 6
- 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 = **Pb**

HALOGEN FREE = **HF**

### Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	AMPERE RANGE / VOLT @ I.R.ABILITY
	800914 903562	1A - 6.3A / 250V AC @150A 8A - 12A / 250V AC @150A
	40007746	1A - 6.3A / 250V AC @150A
	E20624	
	LR39772	
	2003010207030342	

Specifications subject to change without notice

# Type 5ET / 5ETP

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

5 x 20mm Glass Tube  
RoHS 6 Compliant



5ET May2012D

## 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					
5ET (P) 1-R	1A	0.111	0.15	250	1A - 6.3A / 250V AC @150A	28	29	0.42	Y	Y	Y	Y	Y	Y
5ET (P) 1.25-R	1.25A	0.073	0.13	250		42	43	0.42	Y	Y	Y	Y	Y	Y
5ET (P) 1.6-R	1.6A	0.058	0.13	250		62	64	0.51	Y	Y	Y	Y	Y	Y
5ET (P) 2-R	2A	0.039	0.12	250		92	95	0.61	Y	Y	Y	Y	Y	Y
5ET (P) 2.5-R	2.5A	0.031	0.12	250		137	142	0.74	Y	Y	Y	Y	Y	Y
5ET (P) 3.15-R	3.15A	0.023	0.10	250		203	211	0.90	Y	Y	Y	Y	Y	Y
5ET (P) 4-R	4A	0.017	0.10	250		300	313	1.08	Y	Y	Y	Y	Y	Y
5ET (P) 5-R	5A	0.012	0.09	250		444	465	1.31	Y	Y	Y	Y	Y	Y
5ET (P) 6.3-R	6.3A	0.010	0.09	250		658	691	1.58	Y	Y	Y	Y	Y	Y
5ET (P) 8-R	8A	0.007	0.09	250	8A - 12A / 250V AC @150A	252	277	3.11				Y		Y
5ET (P) 10-R	10A	0.006	0.08	250		400	440	3.68				Y		Y
5ET (P) 12-R	12A	0.005	0.08	250		635	699	4.36				Y		Y

Consult manufacturer for other ratings

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# Type 5ET / 5ETP

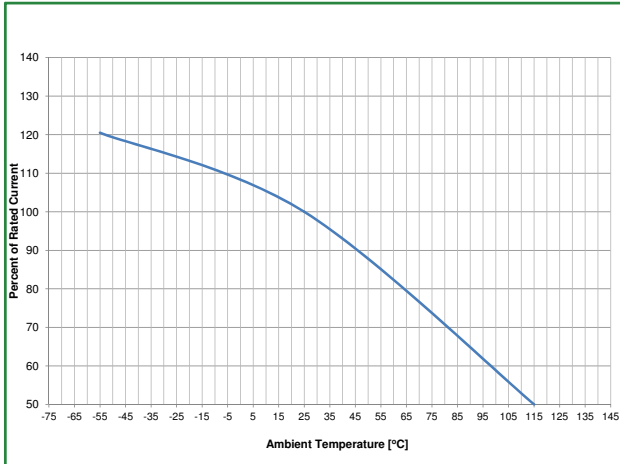
Time-lag Fuse Series (High Surge-proof, Enhanced-breaking Capacity)

5 x 20mm Glass Tube  
RoHS 6 Compliant



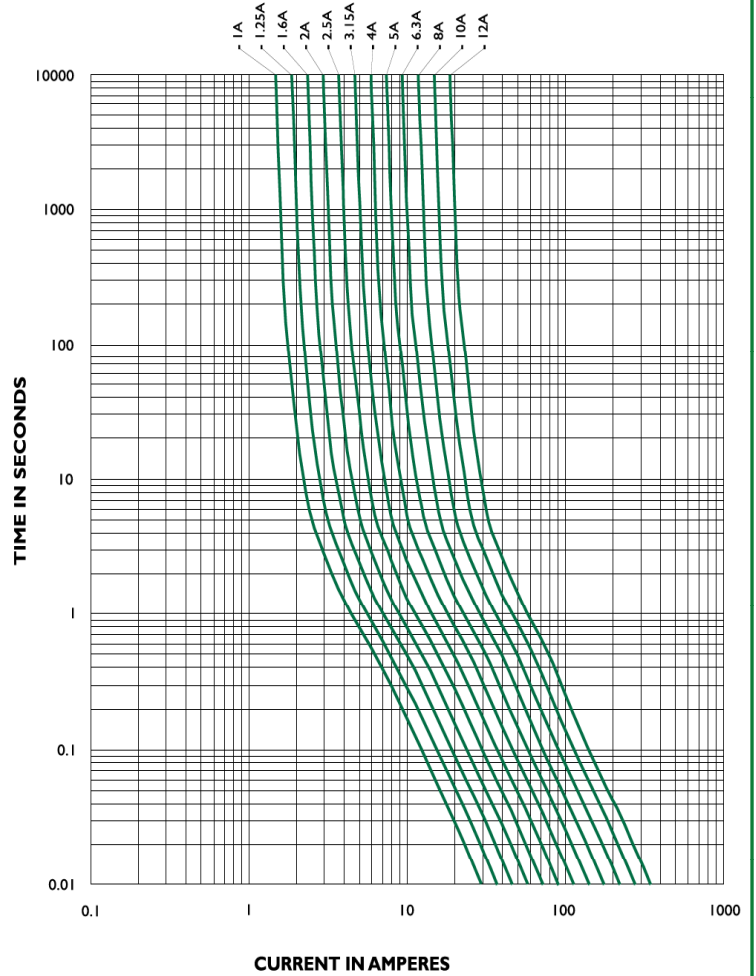
5ET May2012C

## Temperature Derating Curve



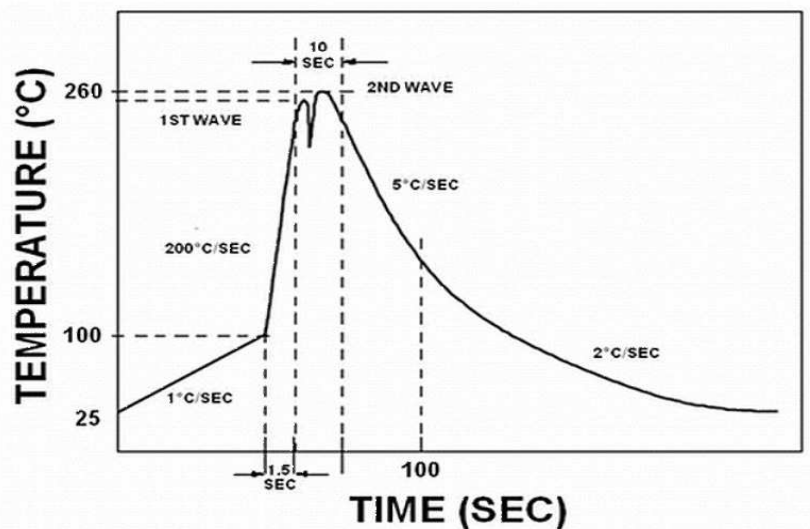
## Average Time Current Curve

### 5ET / 5ETP - TIME CURRENT CHARACTERISTIC 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 <sub>p</sub>	260°C
Time within +0 °C / -5°C of actual peak temperature	10 seconds
Ramp-down rate	5 °C / second max.



## Type 5ET / 5ETP

Time-lag Fuse Series (High Surge-proof, Enhanced-breaking Capacity)



5ET May2012D

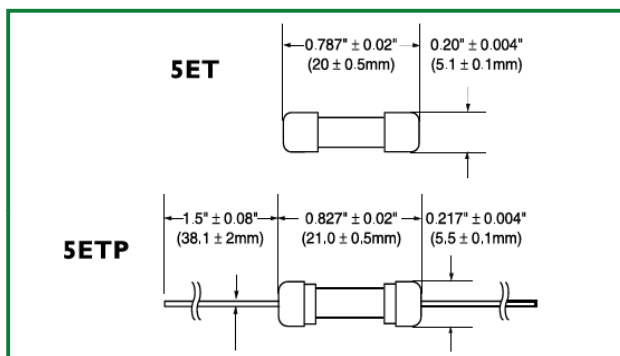
### Physical Specifications

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

### 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

### Mechanical Dimensions



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

### Ordering Information

<b>FUSE TYPE</b>	0655
<b>R</b>	R = RoHS Compliant
<b>AMPERE RATING</b>	Refer to fuse FGNO explanation table
<b>SAFETY STANDARD CODE</b>	1 = IEC
<b>QUANTITY &amp; PACKAGING CODE</b>	9 = 100 pcs / Bulk bag, 1K / Box ,Cartridge Type Fuse 3 = 500 pcs/ bag/ box, Pigtail Type Fuse 6 = 1500 pcs / Reel, Tape and Reel

Specifications subject to change without notice

### Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk	N/A	100	19	N/A
Bulk (Pigtail Type)	N/A	500	13	N/A
Tape & Reel, 10 mm Pitch	EIA-296-F	1500	16	63

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