

# Type UMTS 250V UMF

## Square Ceramic Surface Mount Time Lag Fuse

HF (Pb) UMTS Series - 4818 Size



RoHS 6 Compliant

### Features

- Time lag
- 250VAC, Voltage Rating
- Wide range of current rating from 250mA to 6.3A
- Wide operating temperature range
- Tape & Reel for auto-insert SMD process
- RoHS 6 compliant
- Halogen Free
- Leadfree

### Applications

- Lighting system
- LCD monitor
- Office electronic equipment
- Industrial equipment
- Medical equipment
- Power supply


LEAD FREE =   
 HALOGEN FREE = 



### Electrical Characteristics (Per IEC 60127-4)



Testing Current	Blow Time	
	Minimum	Maximum
125%	1 Hr.	N/A
200%	N/A	2 Min.
1000%	0.01 Sec	0.1 Sec

### Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE	VOLTAGE RATING (V)	AMPERE RANGE / VOLT @ I.R. ABILITY*
	E315341	250mA-6.3A / 250V AC	250mA-6.3A / 250V @150A AC 350V @100A AC

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

### Physical Specifications

Materials	Body : Ceramic
	Terminations : Brass Caps, gold plated with nickel undercoating
Marking	On Fuse :
	"bel", "T", "Current Rating", "L", "250V", in black color.
	On Label :
	"bel", "UMTS", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and  ,  (China RoHS compliant).

Specifications subject to change without notice



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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) 0.1Mohms minimum.
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G, Method 210F, Test Condition J.(235 °C,30 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65 °C to +125 °C).
Operating Temperature	-55 °C to +125 °C
Moisture Sensitivity Level	1 ( Peak Temperature at 240 °C for 30 seconds max )

### Electrical Specifications

Catalog Number	Ampere Rating (A)	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Melting I <sup>2</sup> T @10 In (A <sup>2</sup> Sec)	Maximum Power Dissipation (W)	Agency Approvals
							
UMTS 250	250mA	0.78	0.314	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.26	0.12	Y
UMTS 315	315mA	0.56	0.279		0.42	0.14	Y
UMTS 400	400mA	0.35	0.248		0.67	0.16	Y
UMTS 500	500mA	0.245	0.221		1.1	0.19	Y
UMTS 630	630mA	0.180	0.197		1.7	0.21	Y
UMTS 800	800mA	0.132	0.175		2.8	0.25	Y
UMTS 1	1A	0.085	0.156		4.4	0.28	Y
UMTS 1.25	1.25A	0.065	0.155		7.0	0.33	Y
UMTS 1.6	1.6A	0.061	0.150		5.6	0.37	Y
UMTS 2	2A	0.043	0.145		9.2	0.43	Y
UMTS 2.5	2.5A	0.035	0.140		15	0.50	Y
UMTS 3.15	3.15A	0.025	0.135		25	0.57	Y
UMTS 4	4A	0.020	0.130		42	0.66	Y
UMTS 5	5A	0.014	0.120		69	0.75	Y
UMTS 6.3	6.3A	0.011	0.115		113	0.87	Y

Consult manufacturer for other ratings

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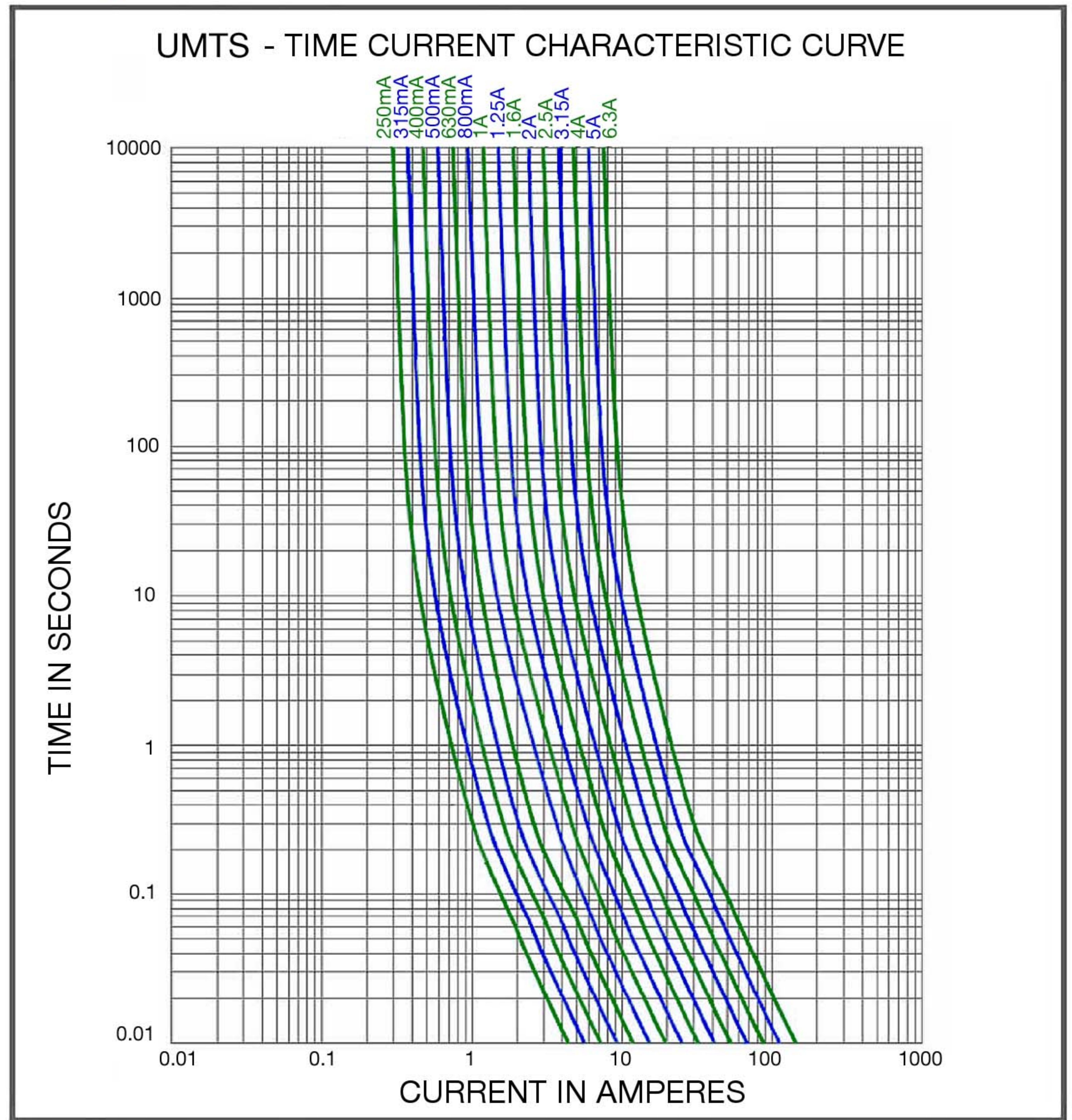
# Type UMTS 250V UMF

Square Ceramic Surface Mount Time Lag Fuse

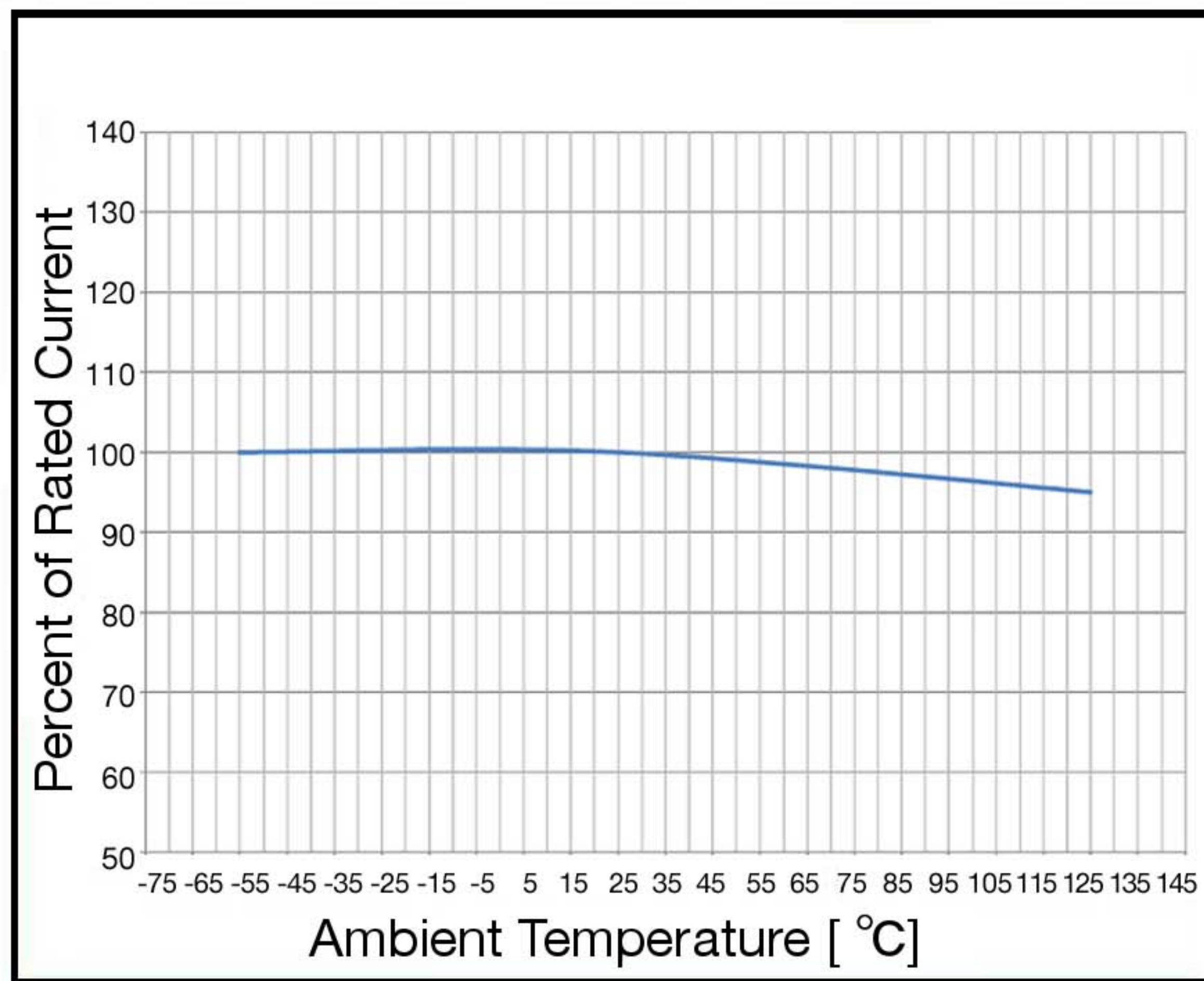
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## Average Time Current Curve

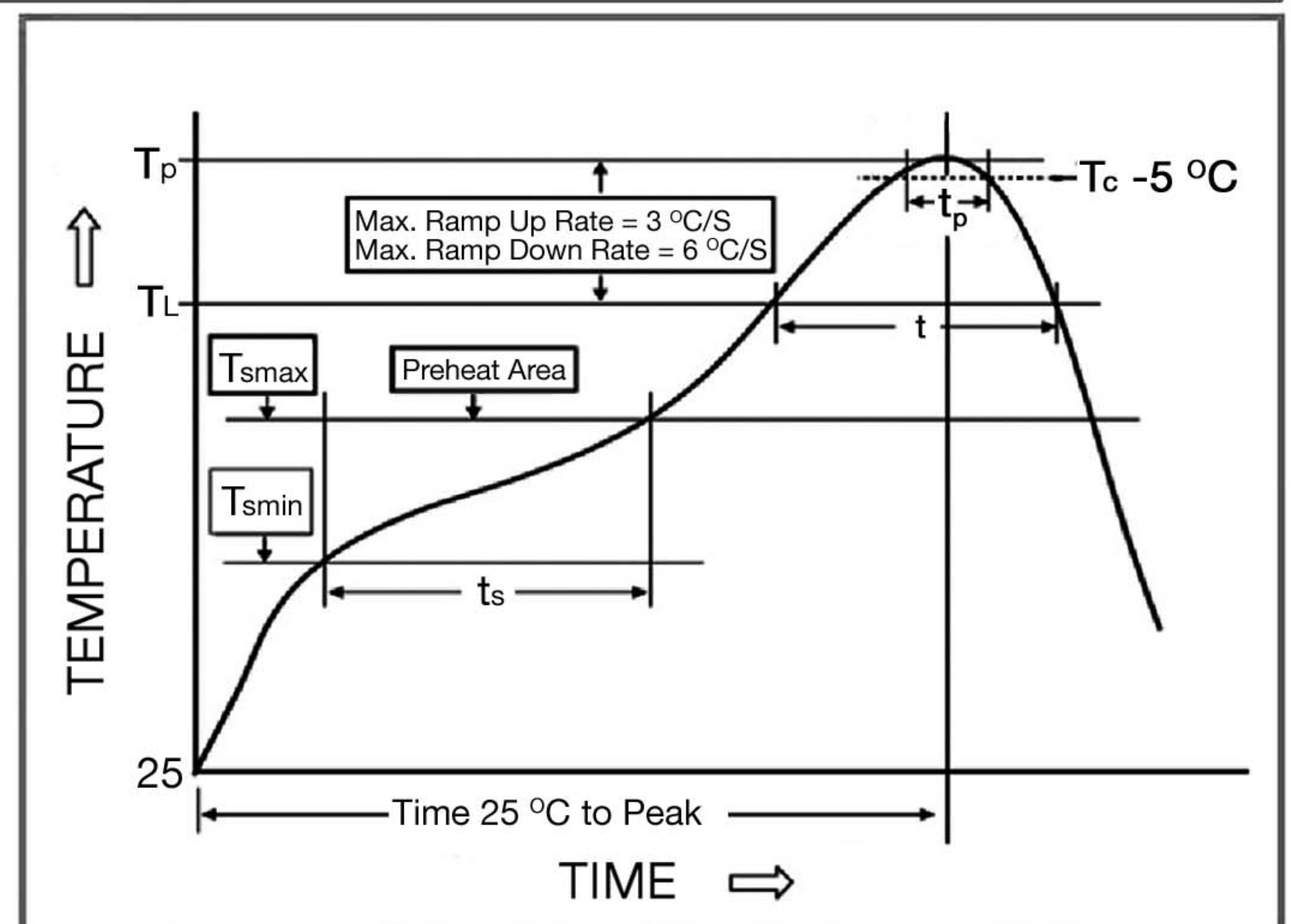


## Temperature Derating Curve



## Soldering Parameters

IR Reflow Profile	
<b>Preheat &amp; Soak</b>	
Temperature min ( $T_{smin}$ )	150 °C
Temperature max ( $T_{smax}$ )	200 °C
Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	60 - 120 seconds
Average ramp-up rate ( $T_{smax}$ to $T_p$ )	3 °C/second max.
Liquidous temperature ( $T_L$ )	217 °C
Time at liquidous ( $t_L$ )	60 - 150 seconds
Peak temperature ( $T_p$ )	240 °C max
Time ( $t_p$ ) within 5 °C of the specified classification temperature ( $T_c$ )	30 seconds
Average ramp-down rate ( $T_p$ to $T_{smax}$ )	6 °C/second max.
Time 25 °C to peak temperature	8 minutes max.



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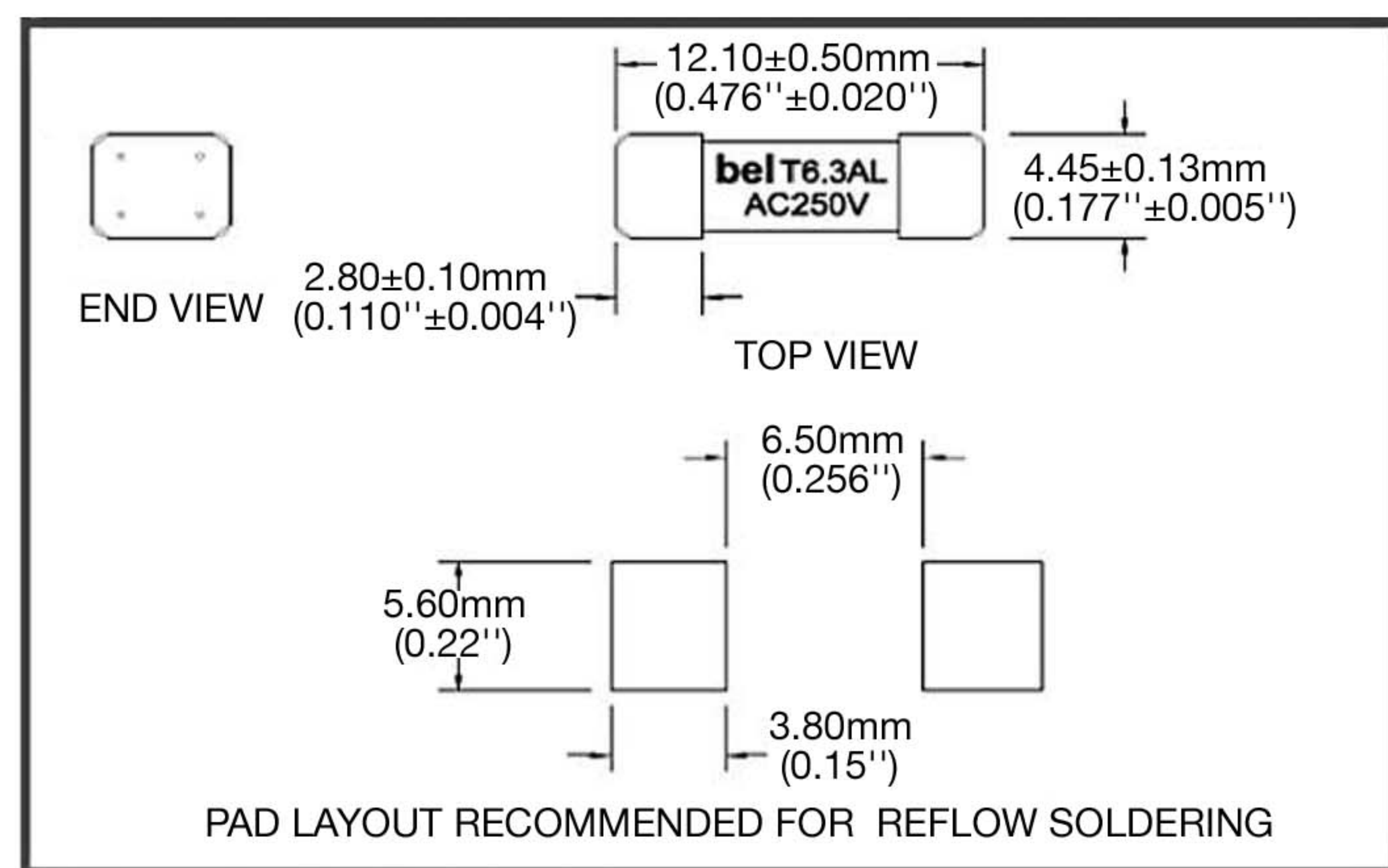
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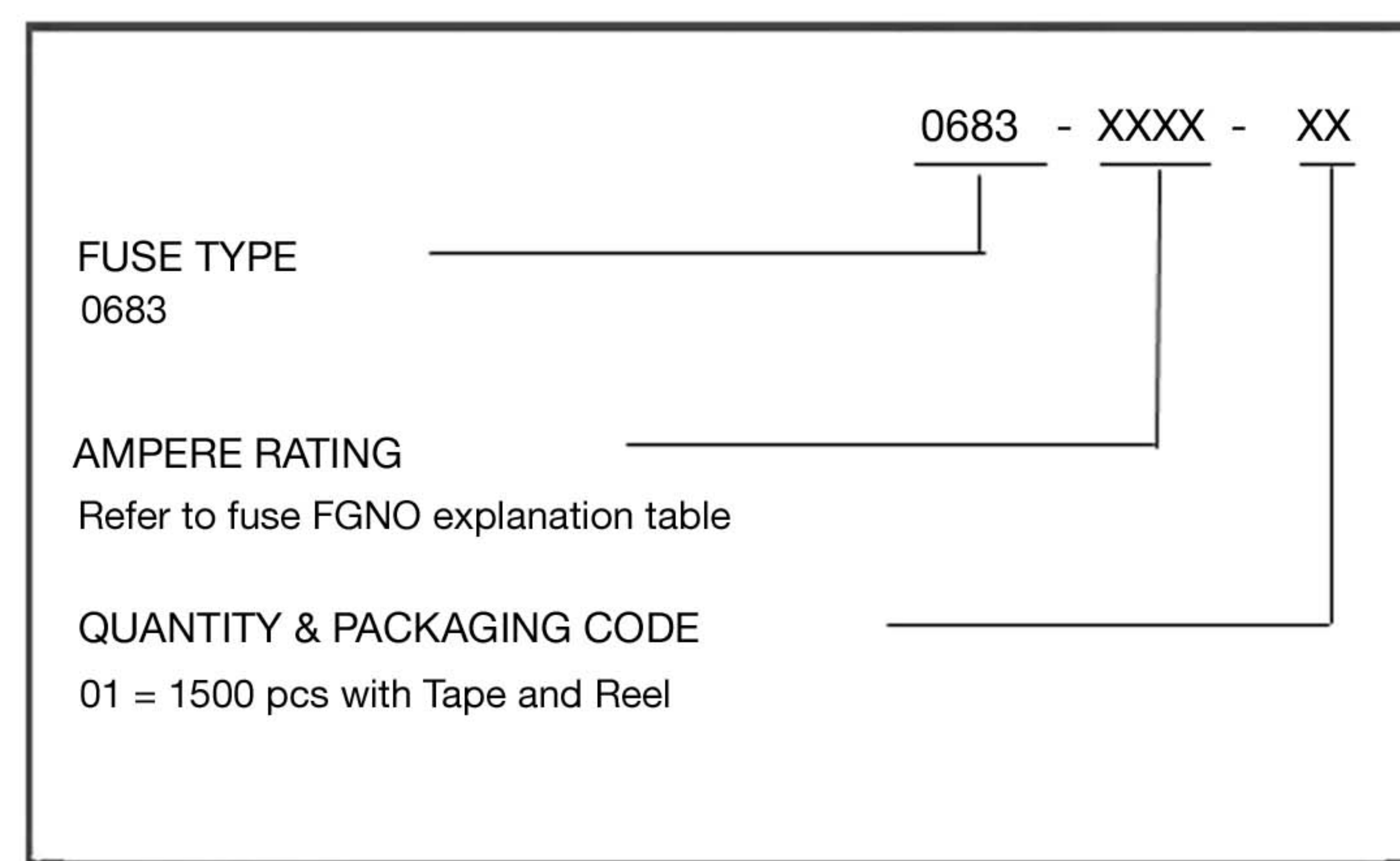
### Fuse FGNO Explanation 06XX X [XXXX] X XX, [XXXX]=Ampere Rating

Fraction	Decimal	Milliamps	Bel FGNO[XXXX]	Fraction	Decimal	Amps	Bel FGNO[XXXX]
1/32	0.032	32	0032		1.0	1	1000
1/25	.040	40	0040	1-1/4	1.25	1.25	1250
1/20	.050	50	0050	1-1/2	1.50	1.5	1500
1/16	.063	63	0063		1.60	1.6	1600
8/100	.080	80	0080		2.0	2	2000
1/10	.100	100	0100	2-1/4	2.25	2.25	2250
1/8	.125	125	0125	2-1/2	2.5	2.5	2500
15/100	.150	150	0150		3.0	3	3000
	.160	160	0160		3.15	3.15	3150
2/10	.200	200	0200	3-1/2	3.5	3.5	3500
1/4	.250	250	0250		4.0	4	4000
3/10	.300	300	0300		5.0	5	5000
	.315	315	0315		6.0	6	6000
3/8	.375	375	0375		6.3	6.3	6300
4/10	.400	400	0400		7.0	7	7000
1/2	.500	500	0500	7-1/2	7.5	7.5	7500
6/10	.600	600	0600		8.0	8	8000
	.630	630	0630			10	9100
7/10	.700	700	0700			12	9120
3/4	.750	750	0750			15	9150
8/10	.800	800	0800			20	9200
						25	9250
						30	9300

### Mechanical Dimensions



### Ordering Information



### Packaging

Packaging Tape & Reel	Packaging Specification	Quantity	Quantity & Packaging Code
24 mm wide tape with 13 inches Diameter reel	EIA Standard 481-E	1500	01

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