

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 = (Pb)
HALOGEN FREE = HF



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*
(UL) US	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

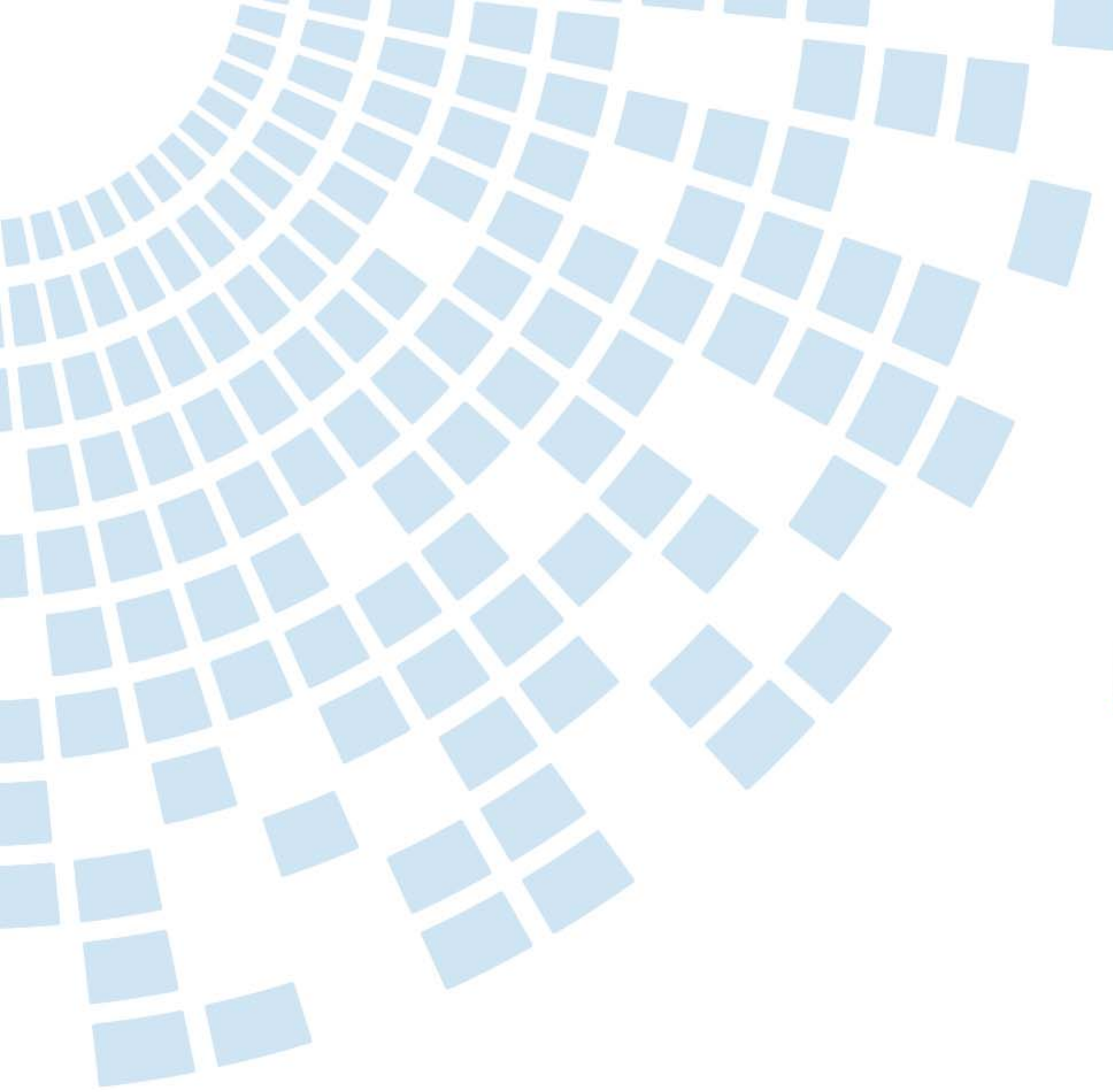
Materials	Body : Ceramic
	Terminations : Brass Caps, gold plated with nickel undercoating
Marking	On Fuse :
	"bel", "T", "Current Rating", "L", "250V", in black color.
	On Label :
	"bel", "UMTS", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "M", "e" (China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

Specifications subject to change without notice



Bel Fuse Inc.
206 Van Vorst Street
Jersey City, NJ 07302 USA

+1 201.432.0463
techhelp@belf.com
belfuse.com



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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 ² T @10 In (A ² 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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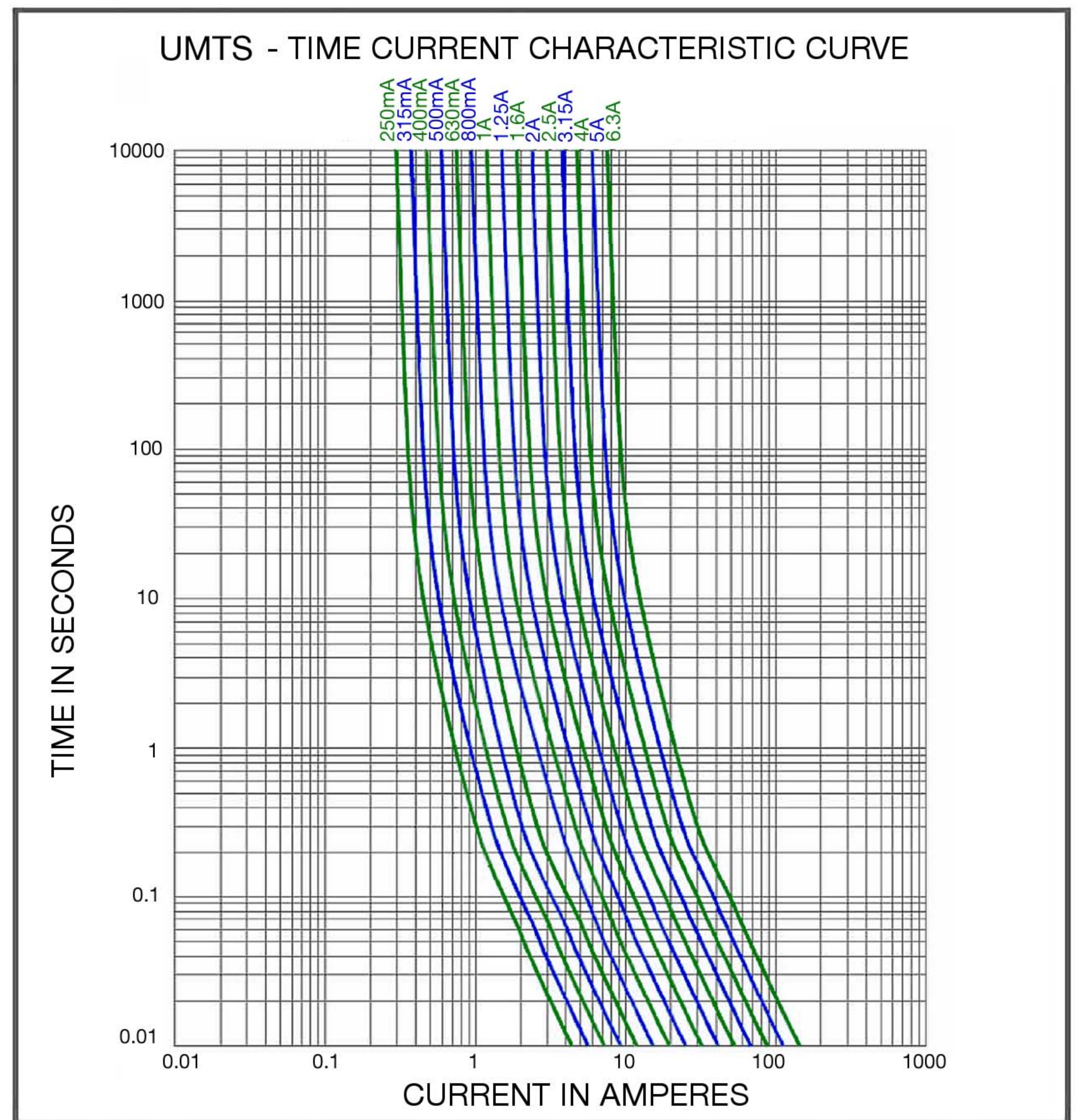
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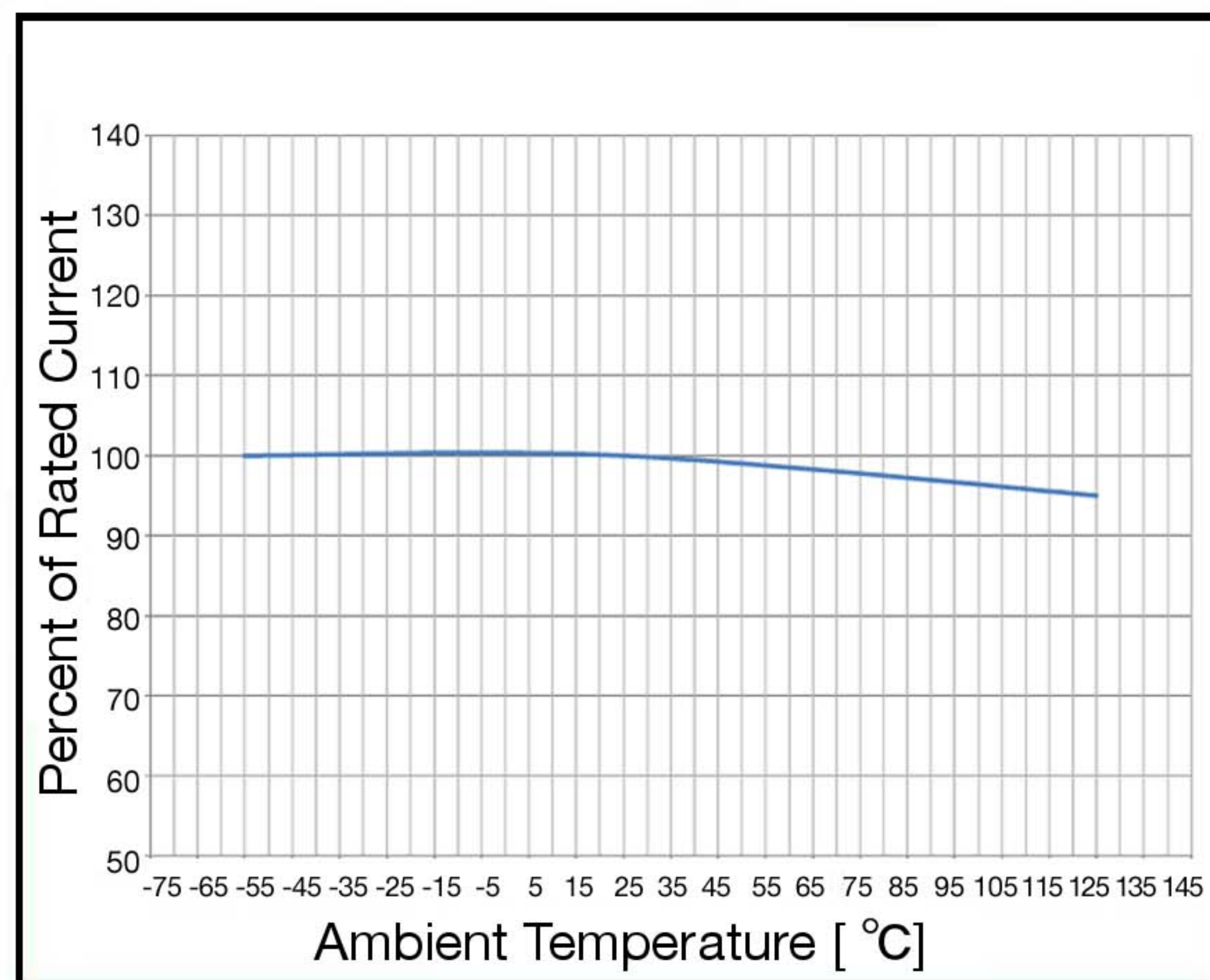
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Average Time Current Curve

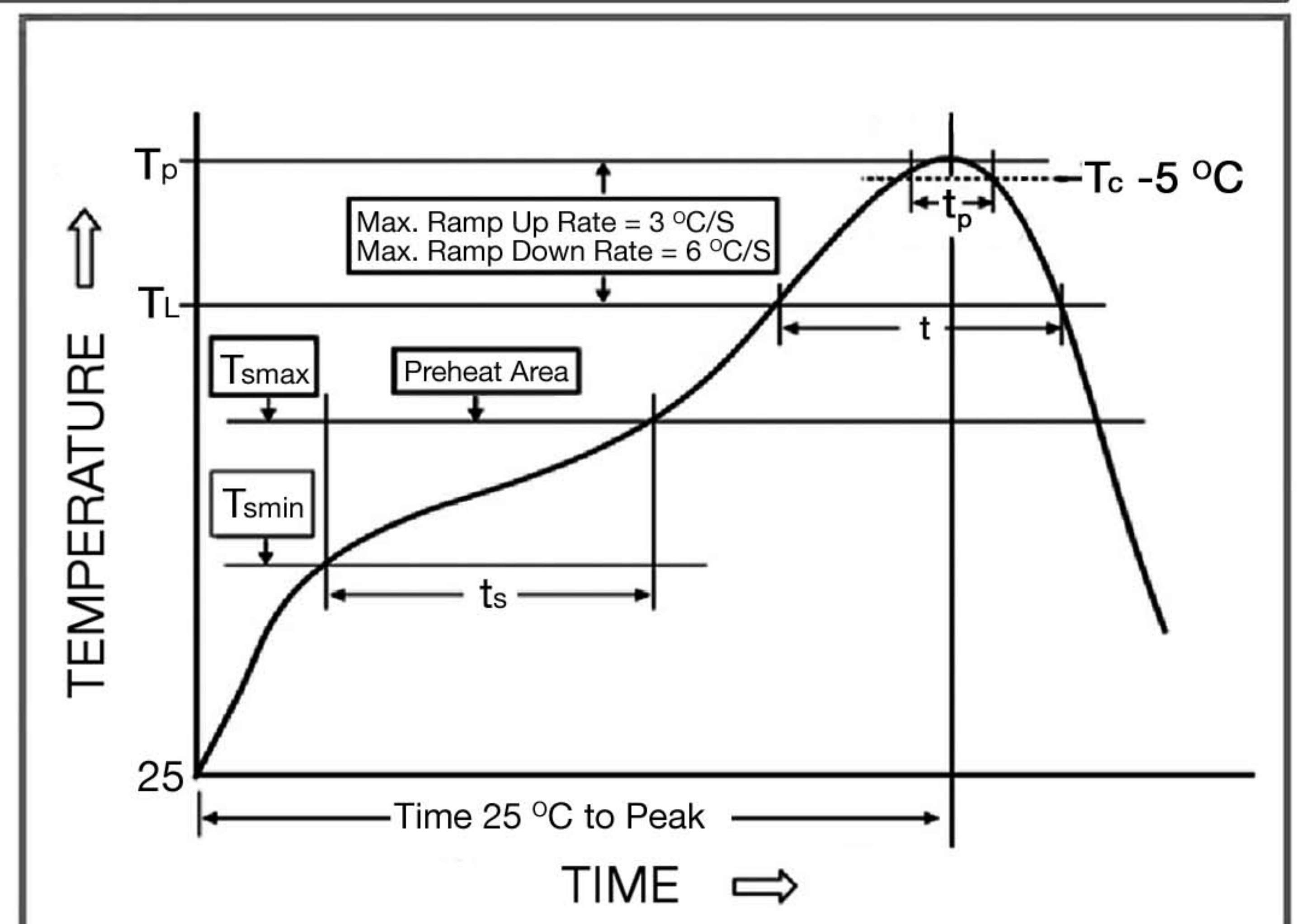


Temperature Derating Curve

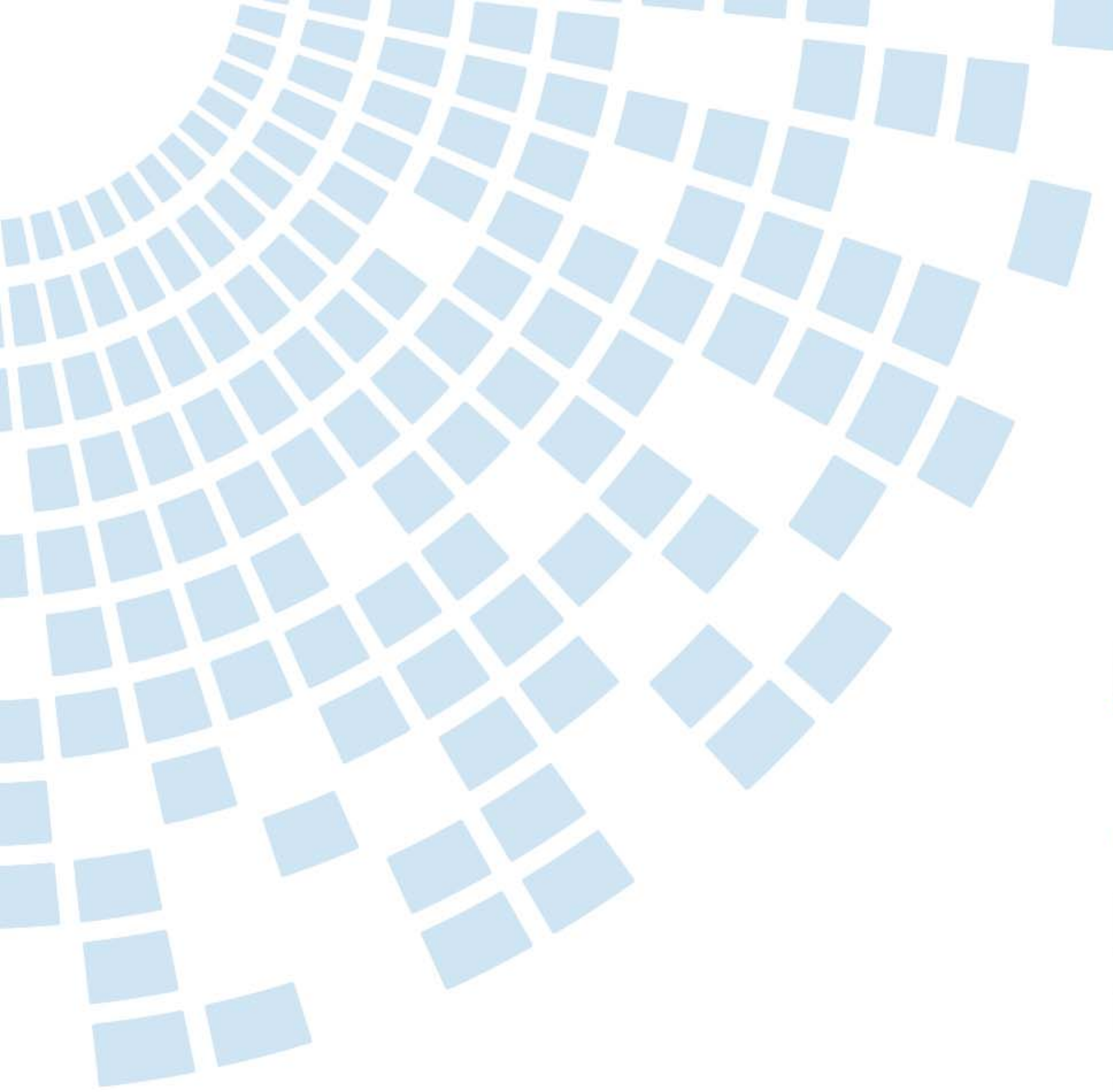


Soldering Parameters

IR Reflow Profile	
Preheat & Soak	
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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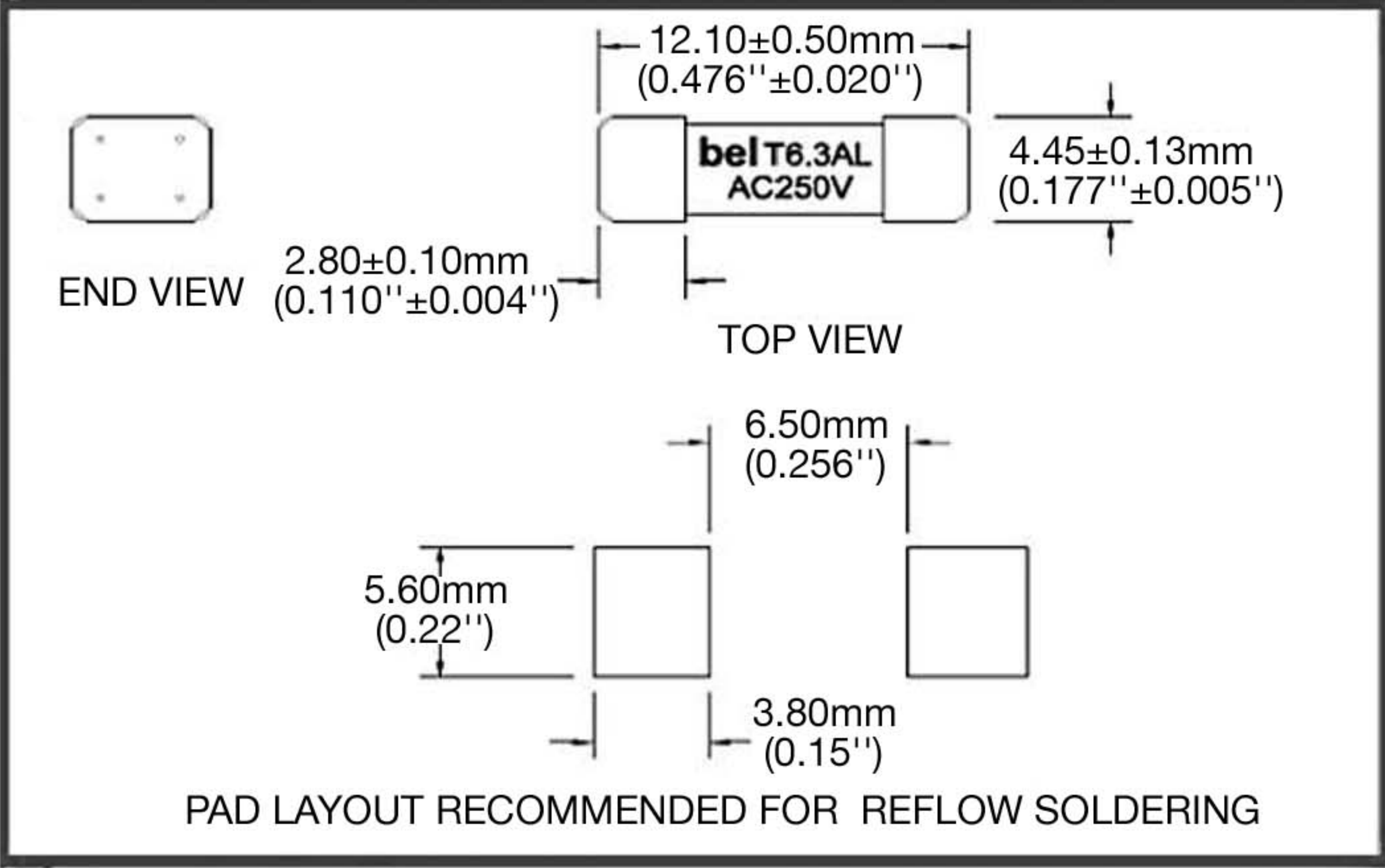
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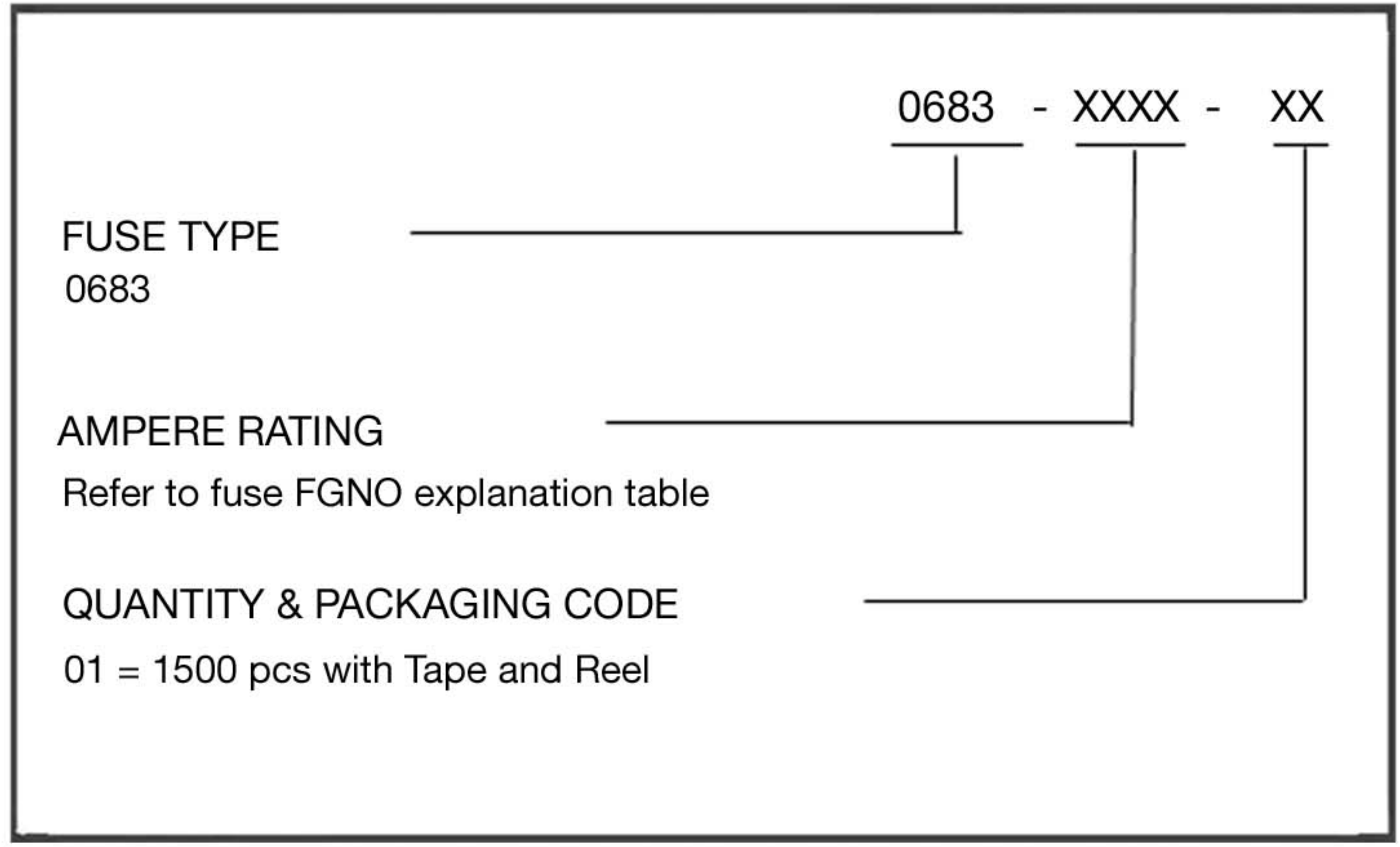
Fuse FGNO Explanation 06XX X [XXXX] X XX, [XXXX]=Ampere Rating

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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