

C310T-SC

3.6 mm x 10 mm Time-delay, axial lead ceramic tube fuses



Product description

- Time-delay
- Designed to IEC60127-3
- Nickel-plated brass single end cap construction
- 3.6 mm x 10 mm compact design utilizes less board space
- Halogen free, lead free, RoHS compliant

Applications

Primary circuit protection:

- Power supplies
- LED and general lighting
- Consumer electronics
- Desktop, laptop and notebook
- Test equipment

Agency information

- cULus Recognition file number: E19180, Guide JDYX2/JDYX8
- CQC: 13012103410, 12012086705
- KC-Mark: File SU05011-13001, SU05030-13006
- TUV: J50247281, J50235242
- VDE: 40036716

Ordering

- Use ordering number (see page 6 for details)

Packaging suffixes

- -TR1 (1500 parts per 10" diameter reel, tape width 60 mm)
- -TR2 (1500 parts per 10" diameter reel, tape width 52 mm)

Electrical characteristics

I_n	$1.5I_n$ min minute	$2.1I_n$ max minute	$2.75I_n$ min ms	max s	$4I_n$ min ms	max s	$10I_n$ min ms	max ms
2A- 6.3A	60	2	400	10	150	3	20	150

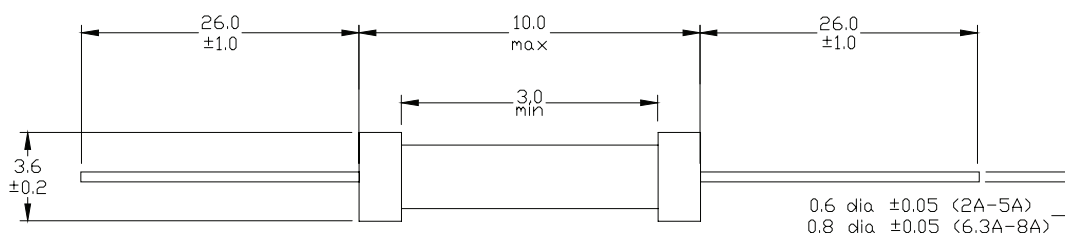
I_n	$1.5I_n$ min minute	$3I_n$ min ms	max s	$10I_n$ min ms	max ms
8A	60	400	10	20	150

Product specifications

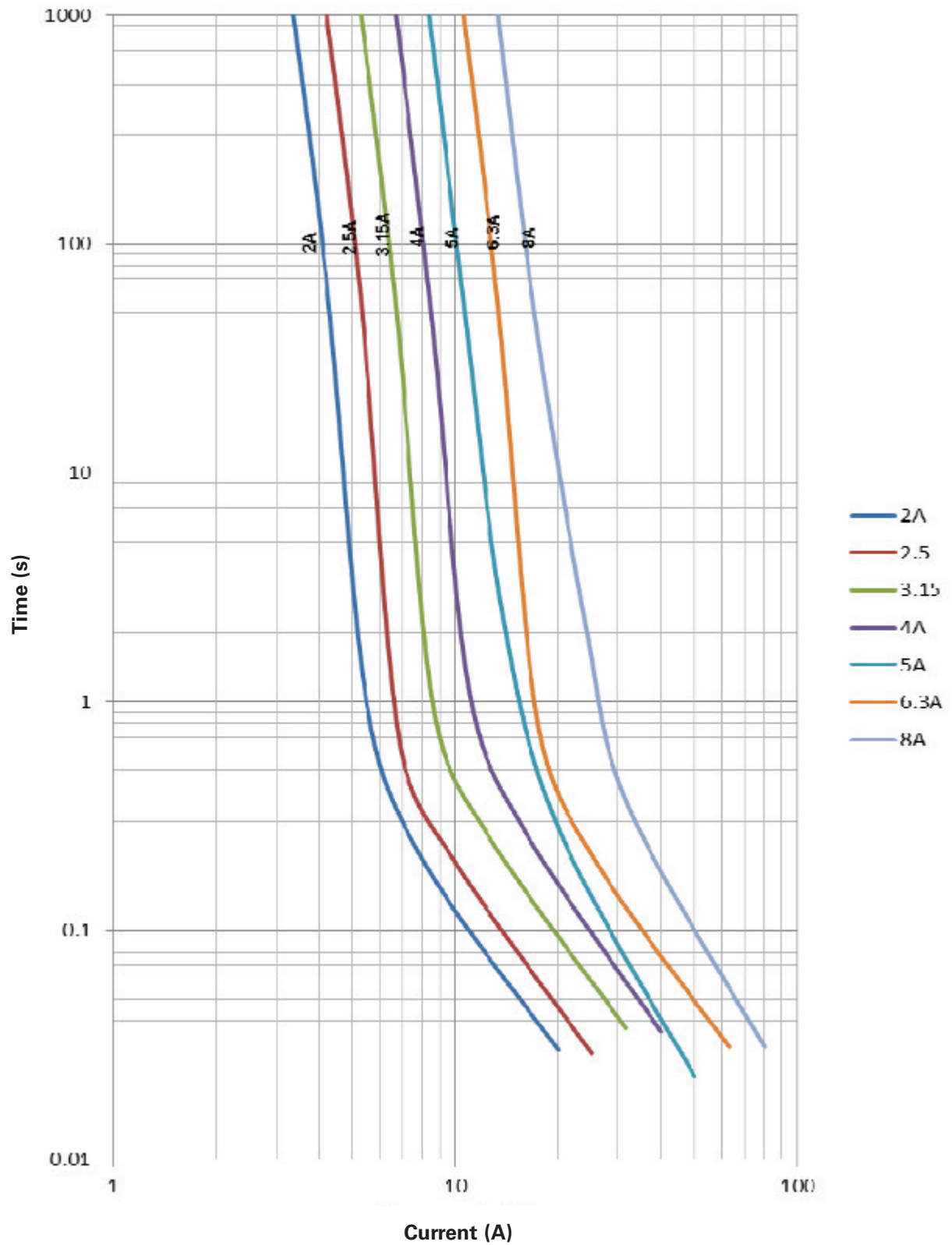
Part number ¹	Current rating (A)	Voltage rating (V _{AC})	Interrupting rating at rated voltage (A)	Typical DC cold resistance (mΩ)	Typical melting I ² t (A ² s)	Maximum voltage drop (mV)	Part marking: engraved on end cap 1st end	Part marking: engraved on end cap 2nd end	cURus	KC	CQC	TUV	VDE
C310T-SC-2-R	2	250	35	26.5	12	100	T2A L 250V	BUSS C310T-SC	x	x	x	x	x
C310T-SC-2.5-R	2.5	250	35	19.5	18.5	100	T2.5A L 250V	BUSS C310T-SC	x	x	x	x	x
C310T-SC-3.15-R	3.15	250	35	14.7	38	100	T3.15A L 250V	BUSS C310T-SC	x	x	x	x	x
C310T-SC-4-R	4	250	40	10.6	58	100	T4A L 250V	BUSS C310T-SC	x	x	x	x	x
C310T-SC-5-R	5	250	50	7.3	57.5	100	T5A L 250V	BUSS C310T-SC	x	x	x	x	x
C310T-SC-6.3-R	6.3	250	63	7.1	123	100	T6.3A L 250V	BUSS C310T-SC	x	x	x	x	x
C310T-SC-8-R	8	250	80	3.7	200	80	T8A L 250V	BUSS C310T-SC	x				

1. Part Number Definition: C310T-SCxxx-R
C310T = Product code
SC = Single cap
xxx = Ampere rating
-R suffix = RoHS compliant

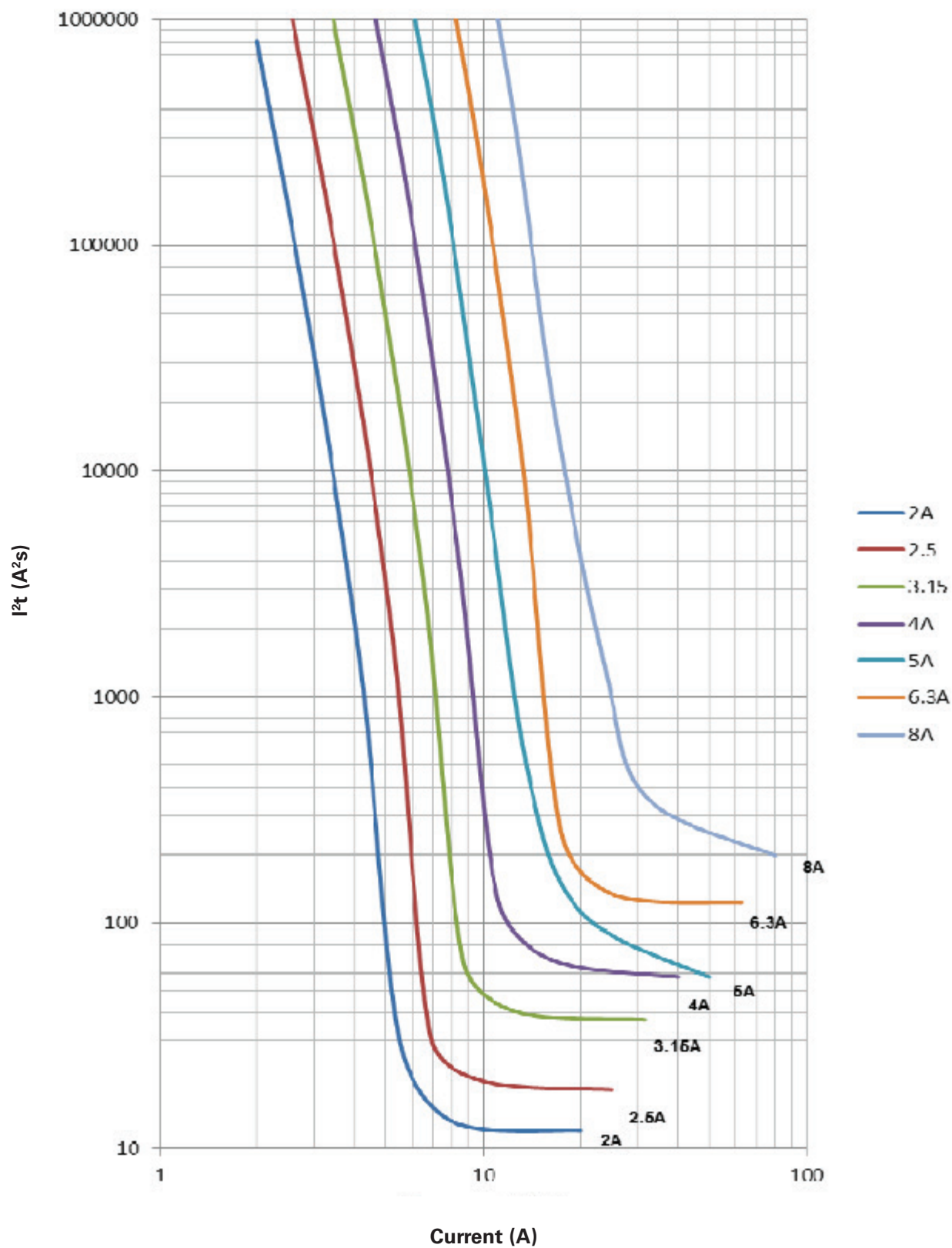
Dimensions—mm



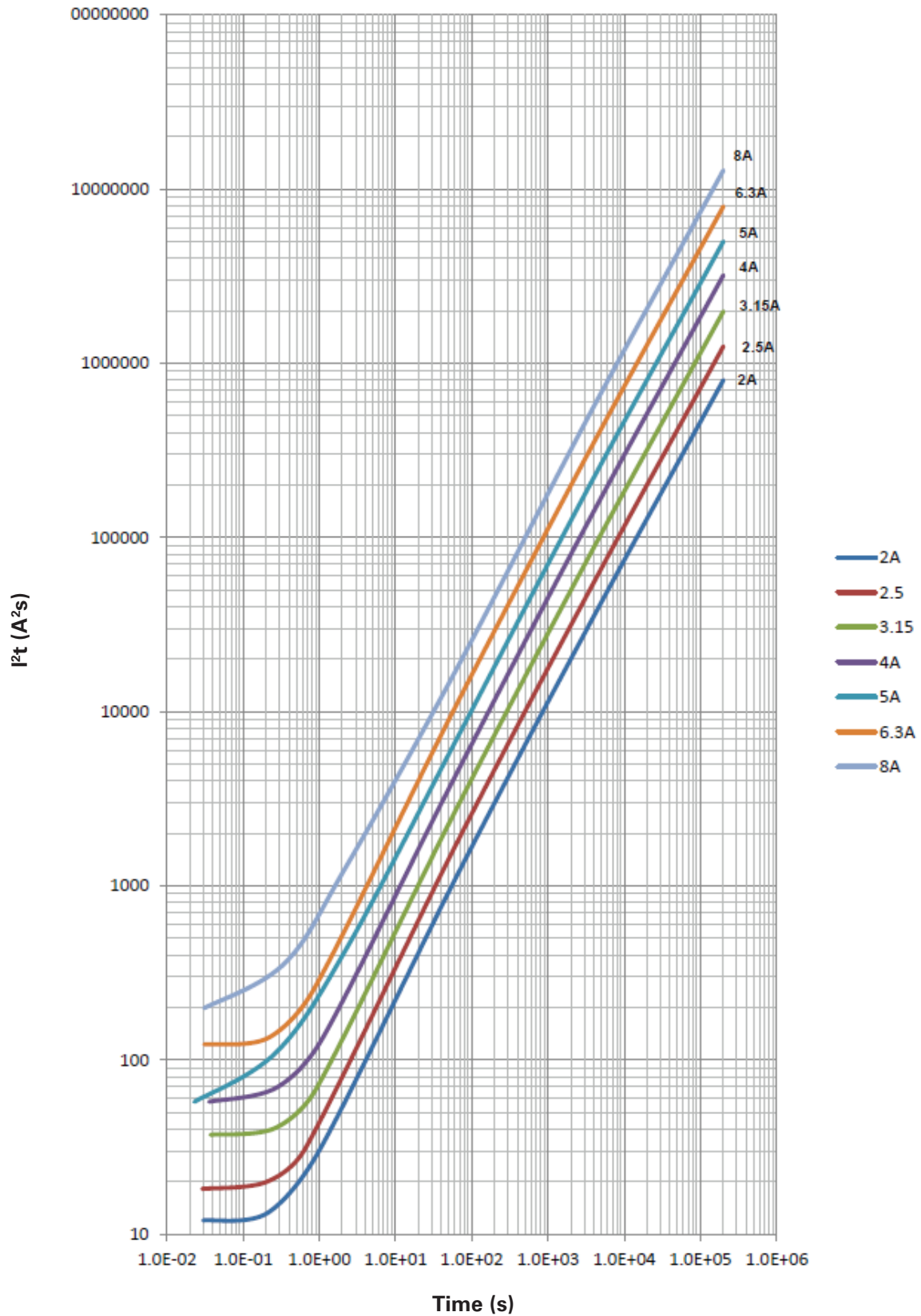
Time vs. current curve



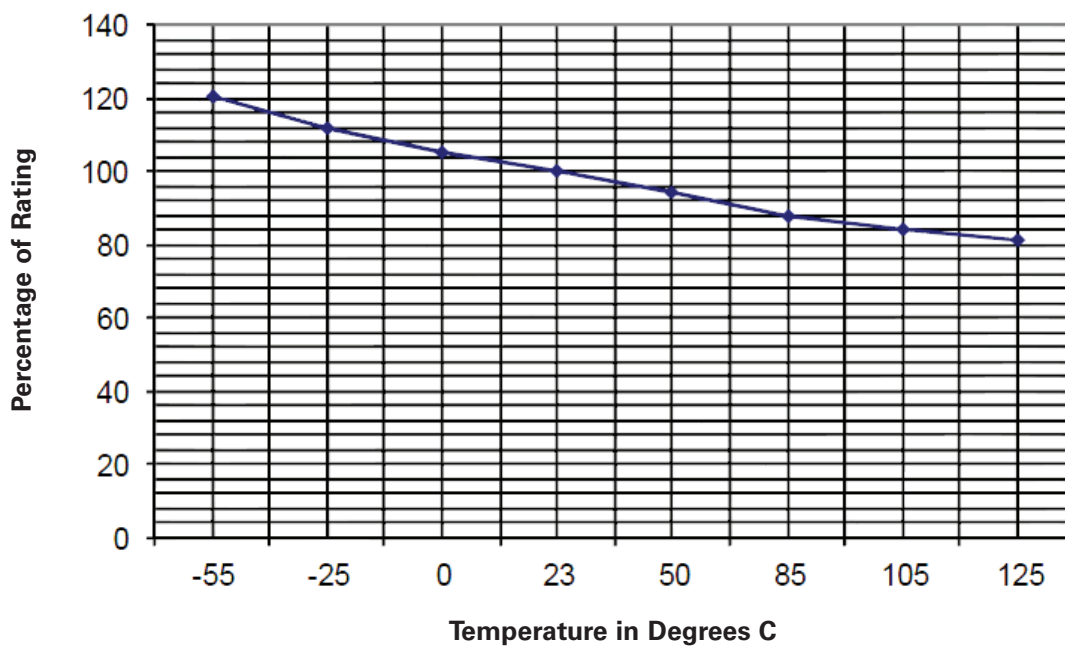
I²t vs. current curve



I²t vs. time curve



Temperature derating curve



Environmental data

Operating temperature: -55 °C to +125 °C (with derating)

Thermal shock: MIL-STD- 202G, Method 107G, test condition B (5 cycles -65 °C to +125 °C)

Vibration: MIL-STD- 202G, Method 201A

Humidity: MIL-STD- 202G, Method 103B, test condition A

Salt spray: MIL-STD- 202G, Method 101D, Test condition B

Ordering codes

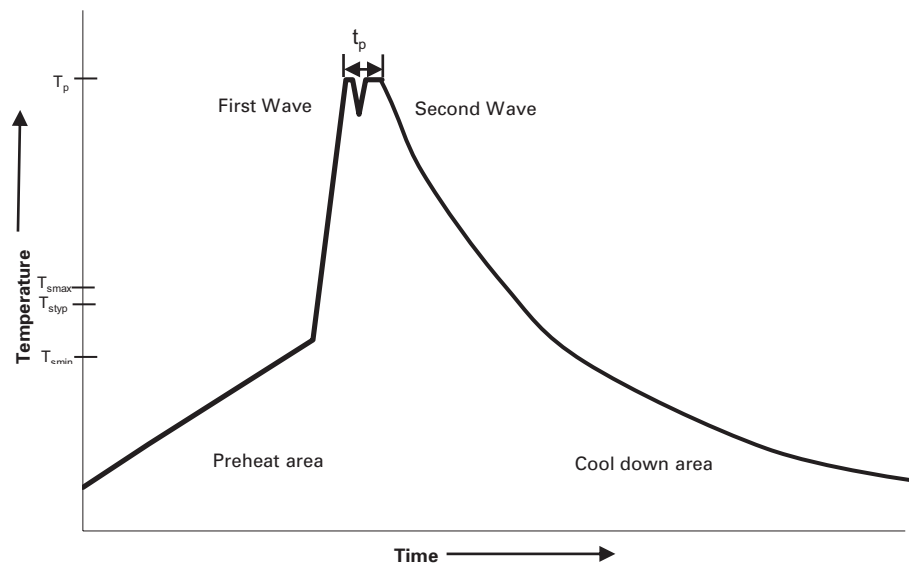
The ordering code is the part number replacing the "." with a "-" plus adding the packaging suffix.

Packaging suffixes

- -TR1 (1500 parts per 10" diameter reel, tape width 60 mm)
- -TR2 (1500 parts per 10" diameter reel, tape width 52 mm)

Part number	Ordering codes	
	-TR1 option	-TR2 option
C310T-SC-2-R	C310T-SC-2-R-TR1	C310T-SC-2-R-TR2
C310T-SC-2.5-R	C310T-SC-2-5-R-TR1	C310T-SC-2-5-R-TR2
C310T-SC-3.15-R	C310T-SC-3-15-R-TR1	C310T-SC-3-15-R-TR2
C310T-SC-4-R	C310T-SC-4-R-TR1	C310T-SC-4-R-TR2
C310T-SC-5-R	C310T-SC-5-R-TR1	C310T-SC-5-R-TR2
C310T-SC-6.3-R	C310T-SC-6-3-R-TR1	C310T-SC-6-3-R-TR2
C310T-SC-8-R	C310T-SC-8-R-TR1	C310T-SC-8-R-TR2

Wave solder profile



Reference EN 61760-1:2006

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat		
• Temperature min. (T_{smin})	100°C	100°C
• Temperature typ. (T_{styp})	120°C	120°C
• Temperature max. (T_{smax})	130°C	130°C
• Time (T_{smin} to T_{smax}) (t_s)	70 seconds	70 seconds
Δ preheat to max Temperature	150°C max.	150°C max.
Peak temperature (T_p)*	235°C – 260°C	250°C – 260°C
Time at peak temperature (t_p)	10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave
Ramp-down rate	~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max
Time 25°C to 25°C	4 minutes	4 minutes

Manual solder

350°C, 4-5 seconds. (by soldering iron), generally manual, hand soldering is not recommended.

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