C310FH

3.1 mm x 10 mm Fast-acting, axial lead ceramic tube fuses

Product features

- Fast-acting
- High breaking capacity
- Designed to IEC60127-3/-7
- Nickel-plated brass single end cap construction
- 3.1 mm x 10 mm compact design utilizes less board space
- Epoxy coated option available

Applications

Primary circuit protection:

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

Agency information

- cURus Recognition file number: E19180, Guide JDYX2/JDYX8
- CCC: 2019010207248424
- KC-Mark: File SU05030-14001
- TUV: R50278944

Ordering

- Use ordering number (see page 4 for details)

Packaging suffixes

- -TR1 (1500 parts on tape and reel, tape width 60 mm)
- -TR2 (1500 parts on tape and reel, tape width 52 mm)
- E-TR1 (Epoxy coated fuse, 1500 parts on tape and reel, tape width 60 mm)

Option code

- Blank (Standard fuse)
- E (Epoxy coated)

Electrical characteristics

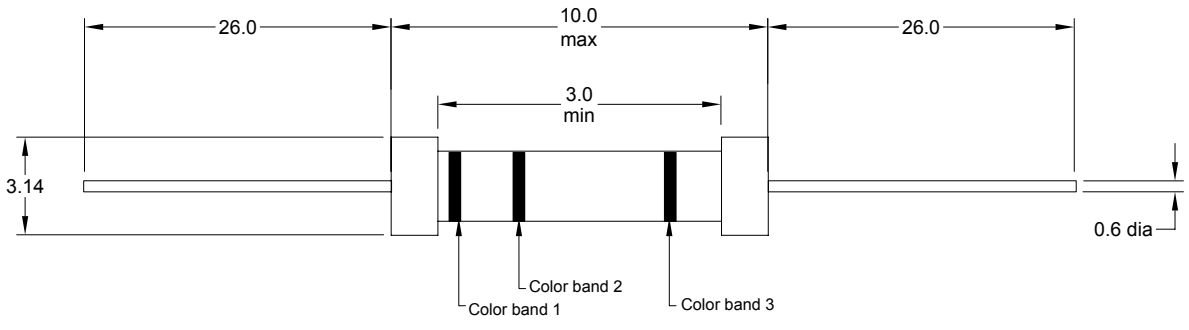
I_n	$1.5I_n$ min hours	$2.1I_n$ max minute	$2.75I_n$ min ms	max s	$4I_n$ min ms	max ms	$10I_n$ max ms
1.25 A- 2.0 A	1.0	30	10	3.0	3.0	300	20

Product specifications

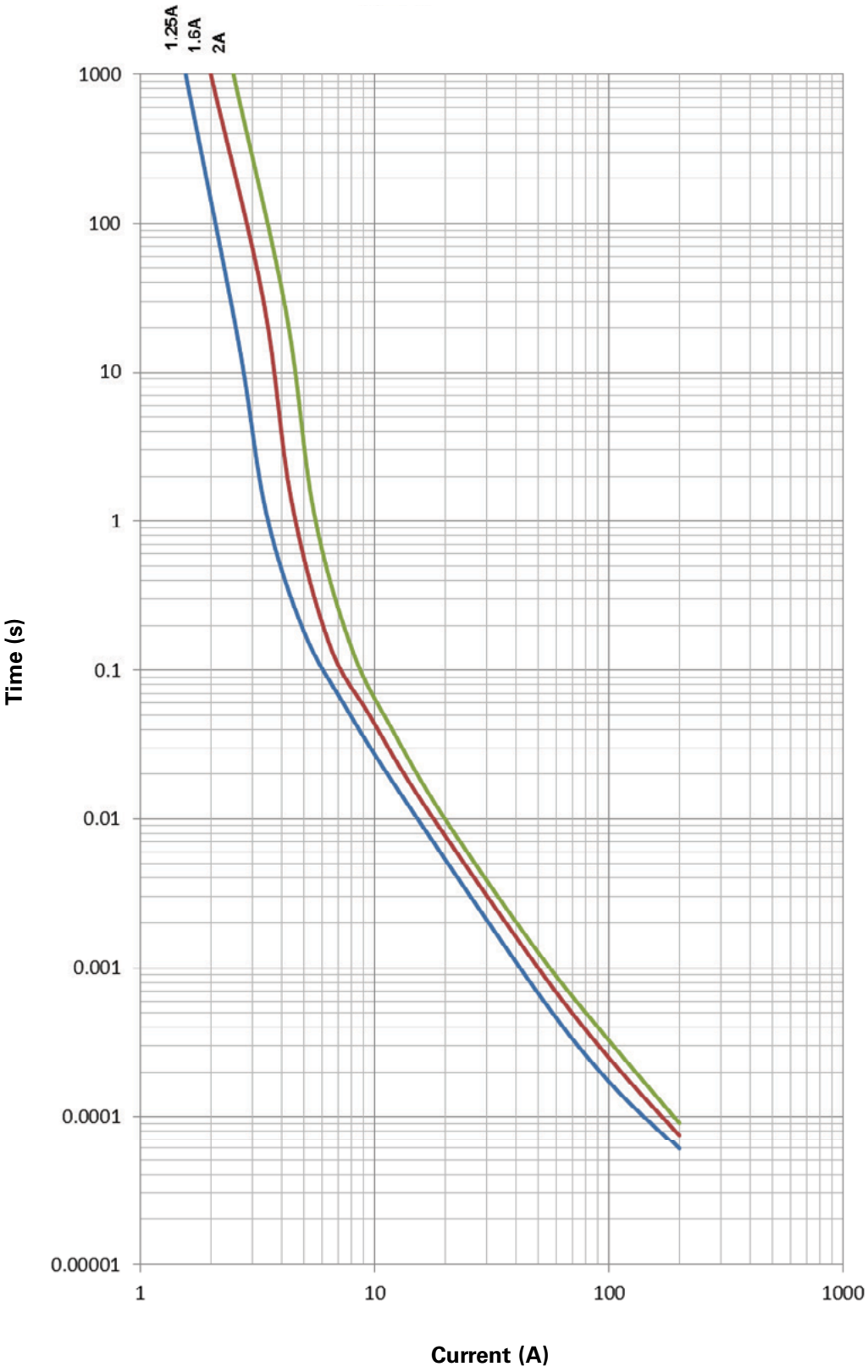
Part number[1]	Current rating (A)	Voltage rating (V_{AC})	Interuppting rating at rated voltage (A)	Typical DC cold resistance (mΩ)	Typical melting I^2t (A^2s)	Maximum voltage drop (mV)	Color code band 1	Color code band 2	Color code band 3
C310FH-1.25-R	1.25	250	150	60	2.7	120	Brown	Red	Red
C310FH-1.6-R	1.6	250	150	55	3.0	120	Brown	Blue	Red
C310FH-2-R	2.0	250	150	30	4.9	120	Red	Black	Red

1. Part Number Definition: C310FH-xxx-R
   C310FH = Product code
   xxx = Ampere rating
   -R suffix = RoHS compliant

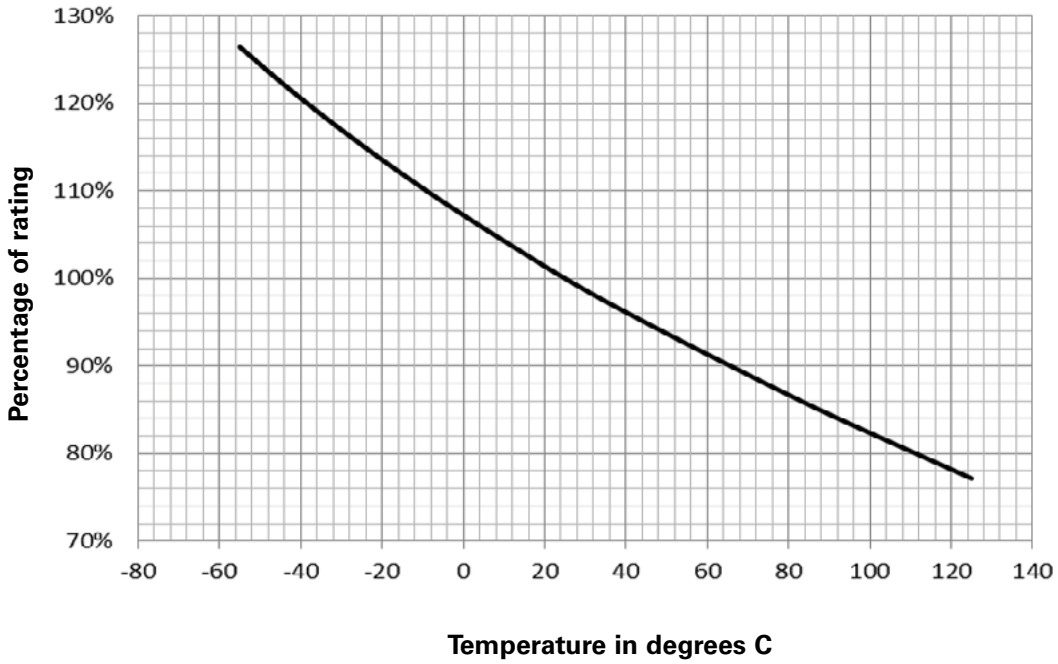
Dimensions–mm



Time vs. current curve



Temperature derating curve



General specifications

Terminal strength: MIL-STD-202G, Method 211A, test condition A
Thermal shock: MIL-STD- 202G, Method 107G, test condition (5 cycles -40 °C to +85 °C)
Vibration: MIL-STD- 202G, Method 201A
Life: MIL-STD- 202G, Method 108, (+70 °C at 60% rated current, 1000 hours)

Ordering codes

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

Packaging suffixes

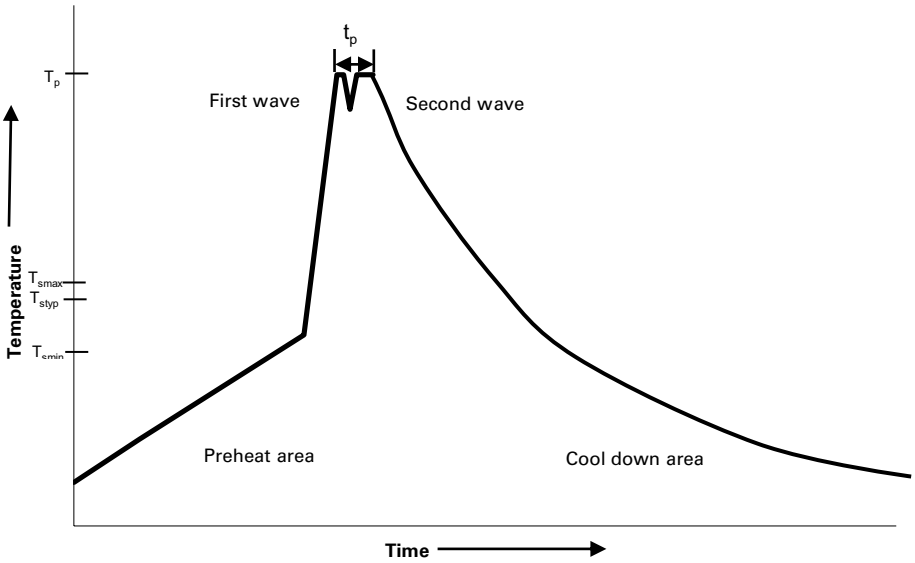
- -TR1 (1500 parts on tape and reel, tape width 60 mm)
- -TR2 (1500 parts on tape and reel, tape width 52 mm)
- E-TR1 (Epoxy coated fuse, 1500 parts on tape and reel, tape width 60 mm)

Option code

- Blank (Standard fuse)
- E (Epoxy coated)

	Ordering codes		
Part number	**-TR1 option**	**-TR2 option**	**E-TR1 option**
C310FH-1.25-R	C310FH-1-25-R-TR1	C310FH-1-25-R-TR2	C310FH-1-25-RE-TR1
C310FH-1.6-R	C310FH-1-6-R-TR1	C310FH-1-6-R-TR2	C310FH-1-6-RE-TR1
C310FH-2-R	C310FH-2-R-TR1	C310FH-2-R-TR2	C310FH-2-RE-TR1

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 (Tp)*		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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