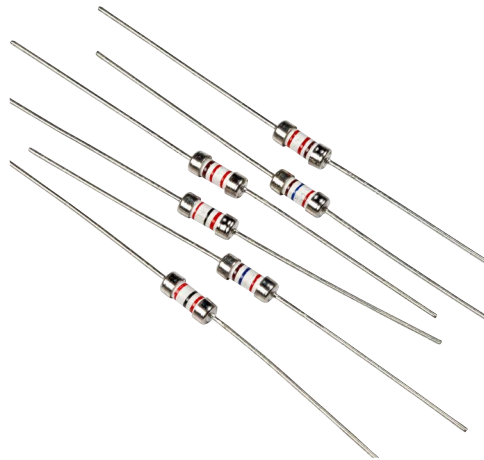


# C310FH

## 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
- 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

- cURus Recognition file number: E19180, Guide JDYX2/JDYX8
- CQC: 14012107423
- 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**

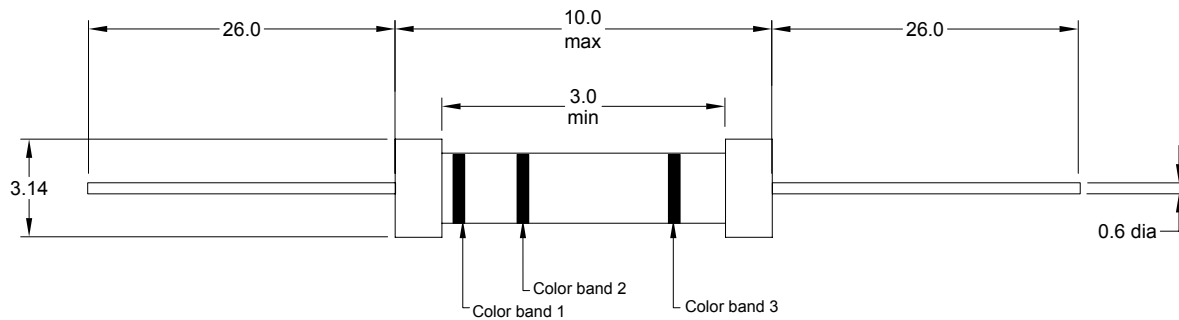
$I_n$	$1.5I_n$ min hours	$2.1I_n$ max minute	$2.75I_n$ min ms	max s	$4I_n$ min ms	max ms	$10I_n$ max ms
1.25 A- 2.0 A	1.0	30	10	3.0	3.0	300	20

**Product specifications**

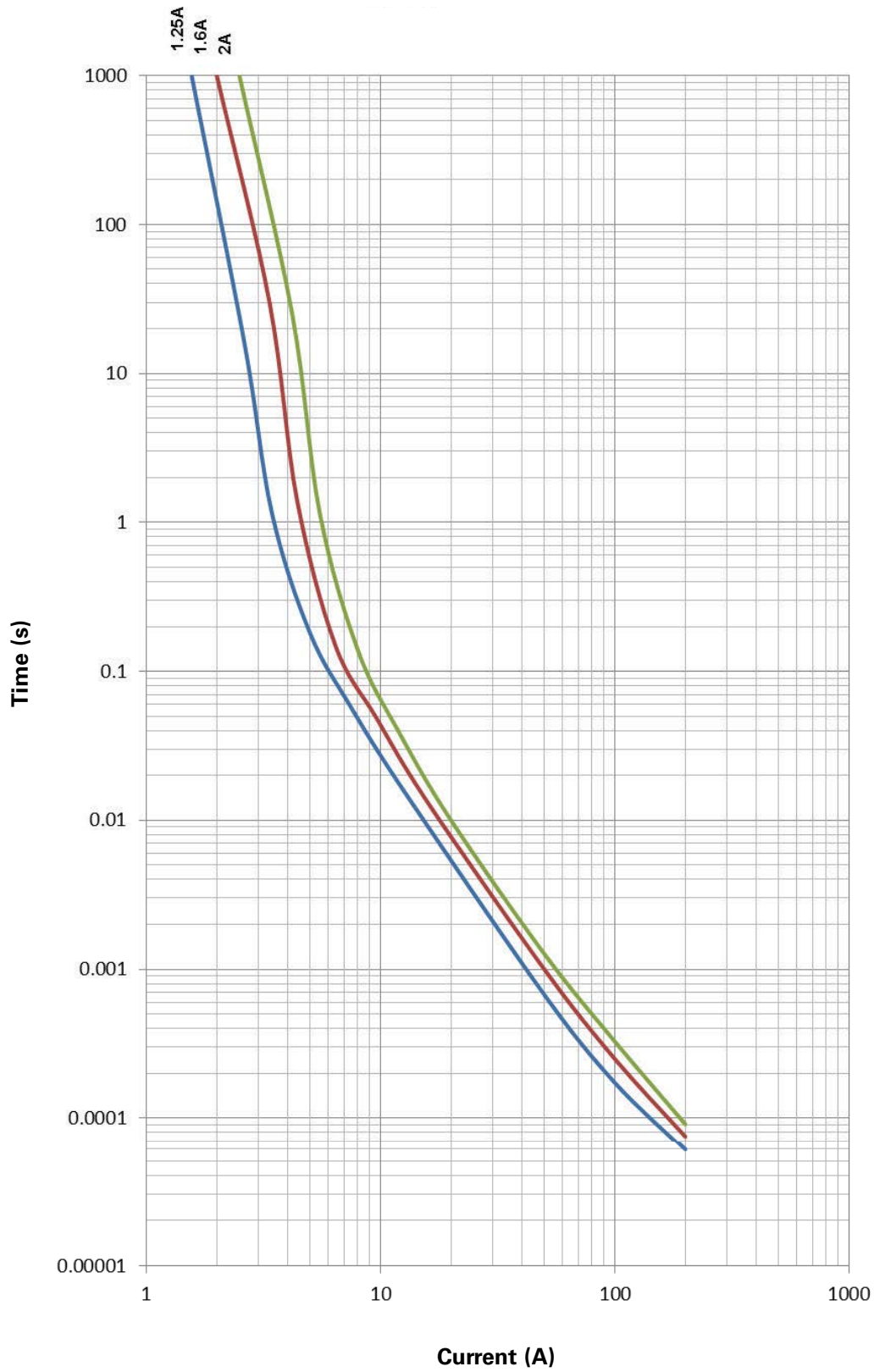
Part number <sup>1</sup>	Current rating (A)	Voltage rating (V <sub>AC</sub> )	Interuppting rating at rated voltage (A)	Typical DC cold resistance (mΩ)	Typical melting I <sup>2</sup> t (A <sup>2</sup> s)	Maximum voltage drop (mV)	Color code band 1	Color code band 2	Color code band 3
C310FH-1.25-R	1.25	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

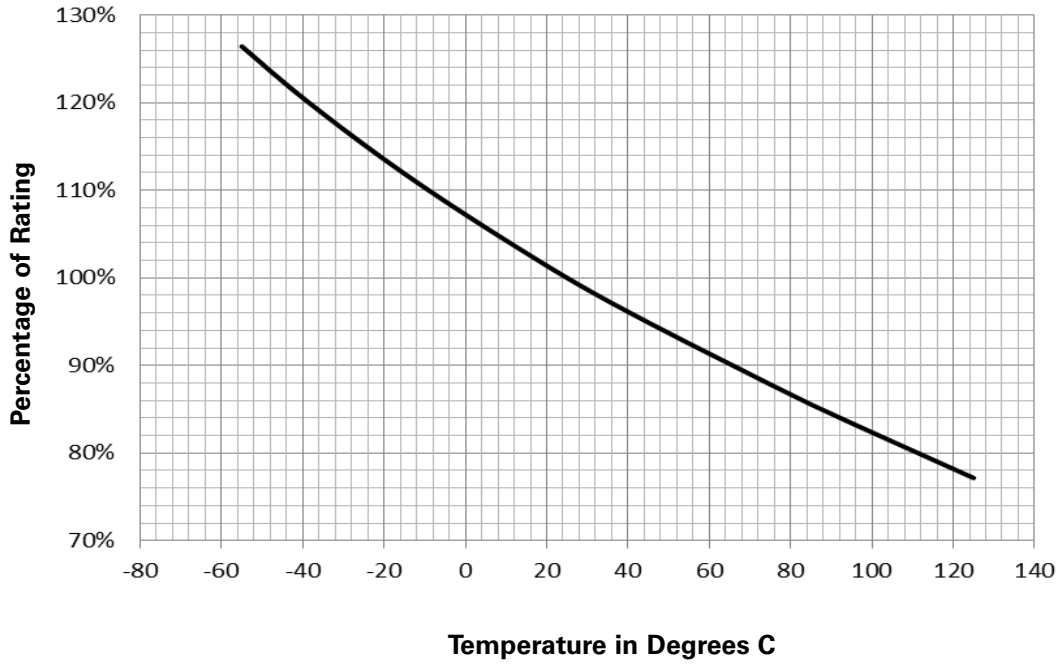
**Dimensions—mm**



Time vs. current curve



**Temperature derating curve**



**Environmental data**

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Terminal strength: MIL-STD-202G, Method 211A, test condition A

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Thermal shock: MIL-STD- 202G, Method 107G, test condition (5 cycles -40 °C to +85 °C)

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

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Life: MIL-STD- 202G, Method 108, (+70 °C at 60% rated current, 1000 hours)

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**Ordering codes**

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

**Packaging suffixes**

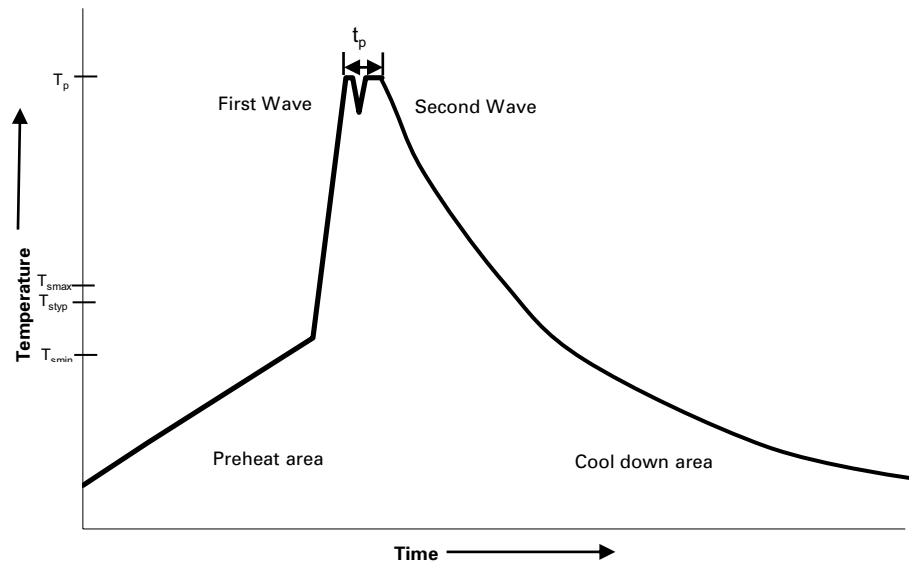
- -TR1 (1500 parts on tape and reel, tape width 60 mm)
- -TR2 (1500 parts on tape and reel, tape width 52 mm)
- E-TR1 (Epoxy coated fuse, 1500 parts on tape and reel, tape width 60 mm)

**Option code**

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

Part number	Ordering codes		
	-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
	• Temperature typ. ( $T_{styp}$ )	120°C
	• Temperature max. ( $T_{smax}$ )	130°C
	• Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	70 seconds
□ 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.

### Reflow solder not recommended

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