# **C310FH** 3.1 mm x 10 mm Fast-acting, axial lead ceramic tube fuses

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## **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

BUSSMANN

- 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**

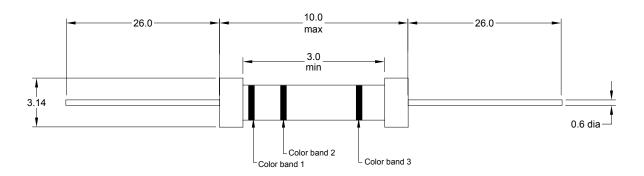
<u>I.</u>	1.51 min hours	2.11 max minute	2.751 <sub>n</sub> min ms	max s	4l min ms	max ms	10l max ms	
1.25 A- 2.0 A	1.0	30	10	3.0	3.0	300	20	

## **Product specifications**

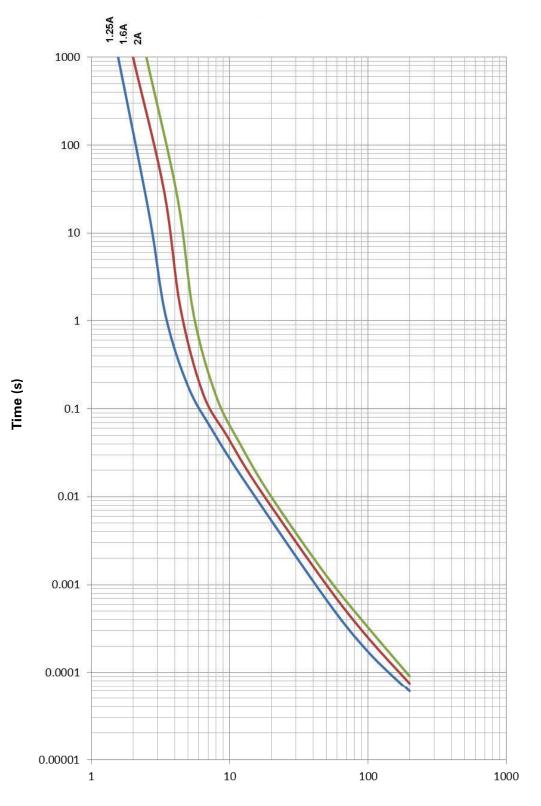
Part number <sup>1</sup>	Current rating (A)	Voltage rating (V <sub>ac</sub> )	Interuppting rating at rated volt- age (A)	Typical DC cold resistance (mΩ)	Typical melting I²t (A²s)	Maximum voltage drop (mV)	Color code band 1	Color code band 2	Color code band 3
C310FH-1.25-R	1.25	250	150	60	2.7	120	Brown	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**

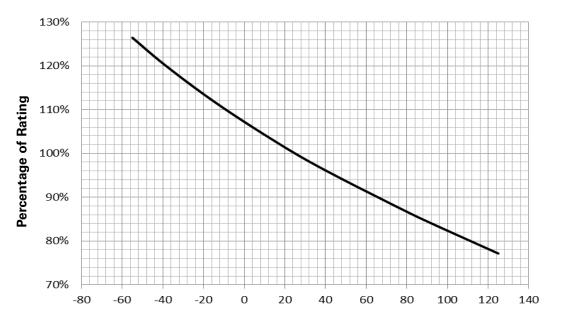


## Time vs. current curve



Current (A)

## Temperature derating curve



**Temperature in Degrees C** 

## **Environmental data**

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**

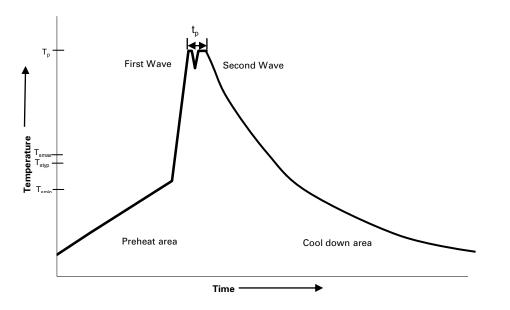
- -TR1 (1500 parts on tape and reel, tape width 60 mm)
- -TR2 (1500 parts on tape and reel, tape width 52 mm)
- E-TR1 (Epoxy coated fuse, 1500 parts on tape and reel, tape width 60 mm)

	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					

## **Option code**

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

## Wave solder profile



### Reference EN 61760-1:2006

Standard SnPb Solder	Lead (Pb) Free Solder	
100°C	100°C	
120°C	120°C	
130°C	130°C	
70 seconds	70 seconds	
150°C max.	150°C max.	
235°C – 260°C	250°C – 260°C	
10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave	
~ 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	
4 minutes	4 minutes	
	100°C   120°C   130°C   70 seconds   150°C max.   235°C – 260°C   10 seconds max   5 seconds max each wave   ~ 2 K/s min   ~3.5 K/s typ   ~5 K/s max	

### 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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