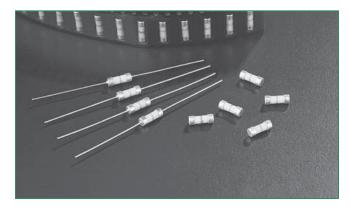
## **Barrier Network Fuse 242 Series**

ittelfuse

Expertise Applied | Answers Delivered



Agency Approvals					
Agency	Agency File Number	Ampere Range			
<b>91</b> °	Recognized under the components program of Underwriters Laboratories (JDYX2-10480)	0.050 - 0.250 A			

## **Electrical Characteristics**

% of Ampere Rating	OpeningTime
110%	4 hours, Minimum
300%	10 seconds, Maximum
1000%	0.002 seconds, Maximum

#### Description

The 242 Series hazardous area barrier network fuse offers a range of fuses designed to enable greater safety operating electronic equipment within potentially explosive environments.

#### Features

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 Meets Barrier Network Standards (EN50020) for hazardous applications.

High interrupting

rating. Meets the

- 1500A minimum.
- Available in both axial lead and surface mount.

**A**I

## Applications

• Type i protected electrical equipment; Electrical connections and components, Test equipment

### **Electrical Characteristics**

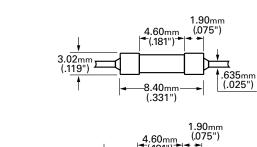
Ampere Rating (A)	Amp Code	Body Color Coding	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² Sec.)	Agency Approvals
0.050	.050	Red	4000A @ 250VAC/VDC	11.34	0.000103	х
0.080	.080	Green		8.19	0.000214	х
0.100	.100	Blue		3.60	0.000977	х
0.160	.160	Violet		3.00	0.00157	х
0.200	.200	Brown		2.68	0.0038	х
0.250	.250	Black		1.6	0.00579	х

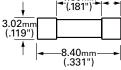
## **Special Application Fuses** 242 Series Barrier Network Fuse

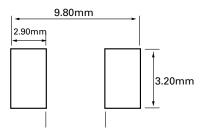
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# **Average Time Current Curves** 050 A 080 A 125 A 160 A 250 A 100 10 TIME IN SECONDS









## **Soldering Parameters**

1

0.1

0.01

0.001

0.1

1

Reflow Co	ndition	Pb – Free assembly	
	-Temperature Min (T <sub>s(min)</sub> )	150°C	
Pre Heat	-Temperature Max (T <sub>s(max)</sub> )	200°C	
	-Time (min to max) (t <sub>s</sub> )	60 – 180 secs	
Average ramp up rate (Liquidus Temp $(T_L)$ to peak $T_{S(max)}$ to $T_L$ - Ramp-up Rate		5°C/second max	
		5°C/second max	
Reflow	-Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
nellow	-Temperature (t <sub>L</sub> )	60 – 150 seconds	
PeakTemp	erature (T <sub>P</sub> )	250 <sup>+0/-5</sup> °C	
Time with	in 5°C of actual peakTemp. (t <sub>p</sub> )	20 – 40 seconds	
Ramp-dow	vn Rate	5°C/second max	
Time 25°C	to peakTemperature (T <sub>P</sub> )	8 minutes Max.	
Do not exc	ceed	260°C	

10

CURRENT IN AMPERES

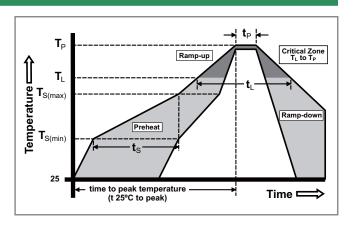
100

1000

## **Product Characteristics**

Operating Temperature	-40°C to 125°C.	
Thermal Shock	Withstands 5 cycles of – 55°C to 125°C	
Vibration	Per MIL-STD-202F	
Insulation Resistance (After Opening)	Greater than 10,000 ohms.	





Wave Soldering

260°C, 10 seconds max.

## Part Numbering System



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