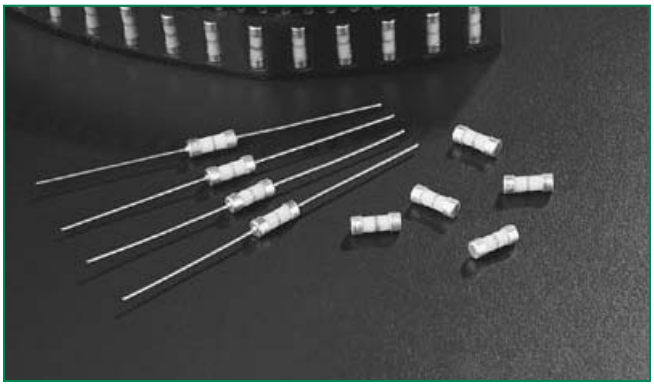
RoHS Barrier Network Fuse 242 Series



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

- Meets Barrier Network Standards (EN50020) for hazardous applications.
- High interrupting rating. Meets the 1500A minimum.
- Available in both axial lead and surface mount.

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
	Recognized under the components program of Underwriters Laboratories (JDYX2-10480)	0.050 - 0.250 A

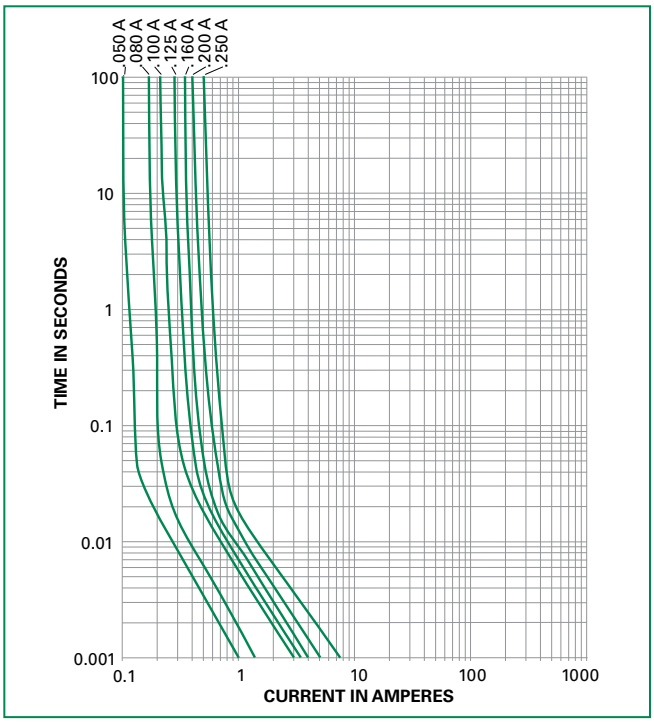
Electrical Characteristics

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

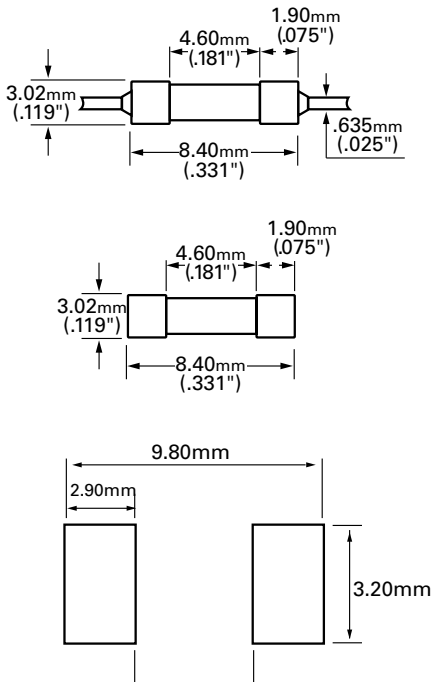
Electrical Characteristics

Ampere Rating (A)	Amp Code	Body Color Coding	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I^2t (A^2 Sec.)	Agency Approvals
0.050	.050	Red	4000A @ 250VAC/VDC	11.34	0.000103	x
0.080	.080	Green		8.19	0.000214	x
0.100	.100	Blue		3.60	0.000977	x
0.160	.160	Violet		3.00	0.00157	x
0.200	.200	Brown		2.68	0.0038	x
0.250	.250	Black		1.6	0.00579	x

Average Time Current Curves

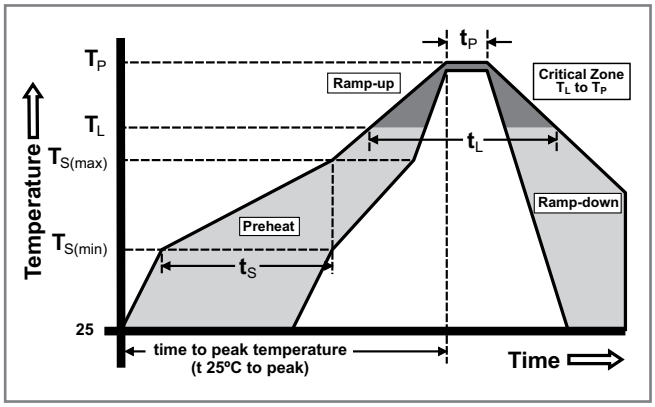


Dimensions



Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	-Temperature Min ($T_{s(min)}$)	150°C
	-Temperature Max ($T_{s(max)}$)	200°C
	-Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		5°C/second max
$T_{S(max)}$ to T_L - Ramp-up Rate		5°C/second max
Reflow	-Temperature (T_L) (Liquidus)	217°C
	-Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		$250^{+0/-5}$ °C
Time within 5°C of actual peak Temp. (t_p)		20 – 40 seconds
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		260°C



Wave Soldering	260°C, 10 seconds max.

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.

Part Numbering System

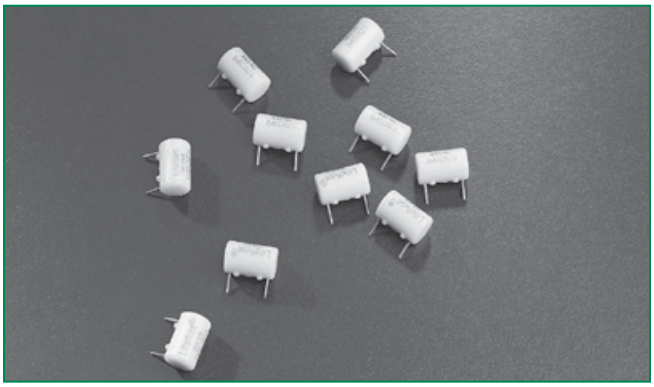
0242.050UAT1

SERIES

AMP CODE
Refer to Amp Code column in the Electrical Specifications table.

QUANTITY & PACKAGING CODE
HAT1 = 100 pcs, Axial Leaded, Ammo Pack T1 Tape
UAT1 = 500 pcs, Axial Leaded, Ammo Pack T1 Tape
UR = 500 pcs, Surface Mount, Tape & Reel

RoHS Safe-T-Plus Fuse 259 Series



Agency Approvals

Agency	Agency File Number	Ampere Range
Baseefa	Baseef02ATEX0071U	.062A - 1.0A

Electrical Characteristics

% of Ampere Rating	Opening Time
100%	4 hours, Minimum
200%	5 seconds, Maximum

Description

The Safe-T-Plus 259 Series offers a range of encapsulated fuses designed to enable greater safety operating electronic equipment within potentially explosive environments. Originally designed to serve the needs of gas plants, petrochemical and processing industries, these fuses are certitifed for use within intrinsically safe apparatus (CENELEC EN50014 to 039 and IEC 60079-11).

The encapsulation material is Polyamide 6 at a minimum depth of 1mm (3mm typically) and has a CTI (Comparative Tracking Index) of greater than 175. The leads are separated by a minimum clearance and creepage distance of 9 mm and hence are suitable for use in intrisically safe appartatus for voltage not exceeding 125V rms (190V peak).

Features

- Hermetically sealed
- .062A - 5A range options
- Designed to operate within environments where there is danger of gas explosion from faulty circuits
- Meets certification for use within intrinsically safe apparatus for applications such as gas plants, petrochemical and processing industries

Applications

- Testing, measuring or processing electronic and electrical equipment

Electrical Characteristics

Ampere Rating (A)	Amp Code	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I^2t (A^2 Sec.)	Nom Voltage Drop (mV)	Agency Approvals
						Baseefa
0.062	.062	50A @ 125 VAC 300A @ 125 VDC	8.1	0.00016	2.10	x
0.125	.125		2.4	0.0012	1.30	x
0.250	.250		0.87	0.0095	0.83	x
0.375	.375		0.46	0.025	0.81	x
0.500	.500		0.32	0.0598	0.78	x
0.750	.750		0.19	0.153	0.23	x
1.00	001		0.14	0.256	0.24	x
3.15	003		0.0295	1.27	0.131	
5	005		0.0158	4.14	0.110	

Schedule of limitations.

1) The fuse must be so mounted that creepage and clearance distances aren't impaired in any way.

2) When used in intrinsically safe apparatus it will be necessary to determine a surface temperature classification for the fuse.

3) Max surface temp rise at 170% rated current £750mA=40°C, 1A=45°C, 3A=63°C and 5A=114°C.

259 Series

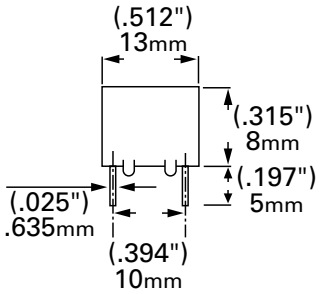
Product Characteristics

Operating Temperature	– 55°C to 90°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.

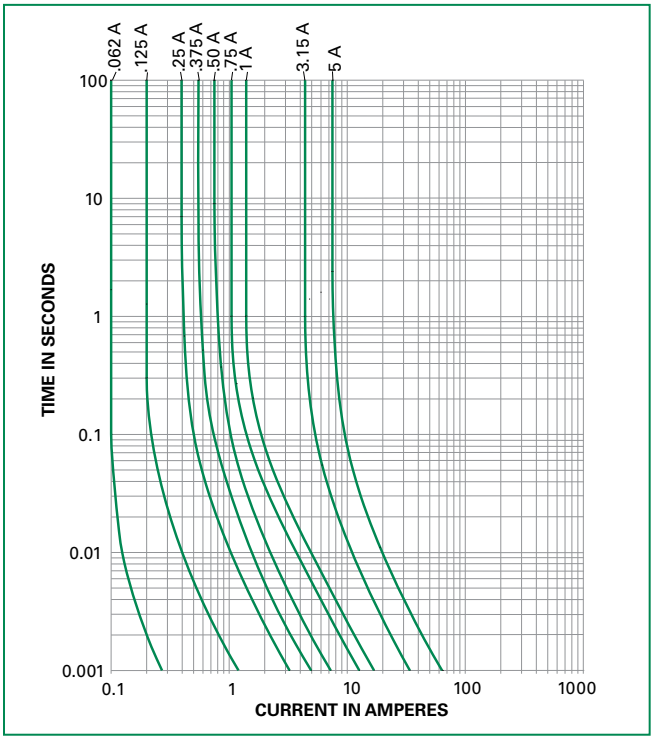
Soldering Parameters

Wave Soldering	260°C, 10 seconds max.

Dimensions



Average Time Current Curves



Part Numbering System

0259.062M

SERIES

AMP Code
The dot is poisitioned before the Packaging Suffix with whole ratings and within the numbering sequence for fractional ratings. Refer to Amp Code column in the Electrical Specifications table.

PACKAGING Code
M = Bulk pack, 1000 pcs
T = Bulk pack, 200 pcs

Example:
1 amp product is
0259**001.**M
(.062 amp product shown).