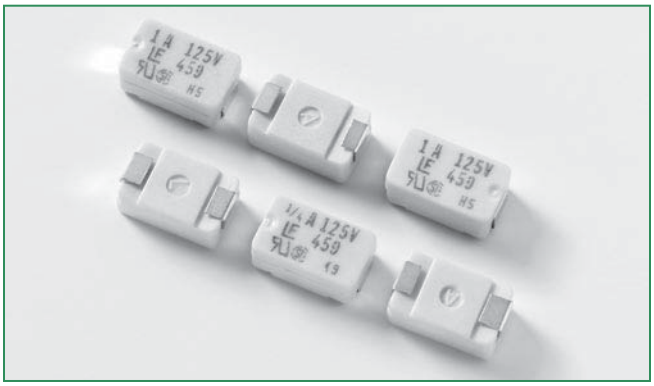
RoHS 459 Series PICO® Very Fast-Acting Surface Mount Fuse



Description

The 459 Series Very Fast-Acting SMF is based on Littelfuse PICO® fuse technology, though offered in a surface mount package.

This series of devices meets the requirements of the RoHS directive.

Features

- Very Fast-Acting
- Wide current rating range: 62mA to 5A
- Wide operating temperature range
- Low temperature rerating
- RoHS compliant

Applications

- Wireless basestation
- Network equipment
- Telecom equipment

Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
	E10480	62mA - 5A
	LR29862	62mA - 5A

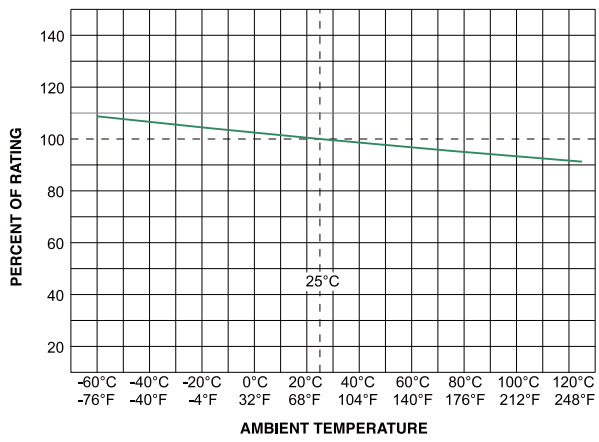
Electrical Characteristics for Series

% of Ampere Rating	Opening Time
100%	4 hours, Minimum
200%	1 second, Maximum
300%	0.1 second, Maximum

Electrical Specifications by Item

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I^2t (A^2sec)	Agency Approvals	
0.062	.062	125	50 A @125 VAC 300 A @125 VDC	7.0000	0.000075	x	x
0.125	.125	125		1.7000	0.00163	x	x
0.250	.250	125		0.6650	0.0106	x	x
0.375	.375	125		0.3950	0.0254	x	x
0.500	.500	125		0.2800	0.0546	x	x
0.750	.750	125		0.1750	0.155	x	x
1.00	001.	125		0.1250	0.281	x	x
1.50	01.5	125		0.0800	0.650	x	x
2.00	002.	125		0.0468	0.421	x	x
2.50	02.5	125		0.0350	0.721	x	x
3.00	003.	125		0.0290	1.23	x	x
3.50	03.5	125		0.0240	1.65	x	x
4.00	004.	125		0.0200	2.35	x	x
5.00	005.	125		0.0155	3.90	x	x

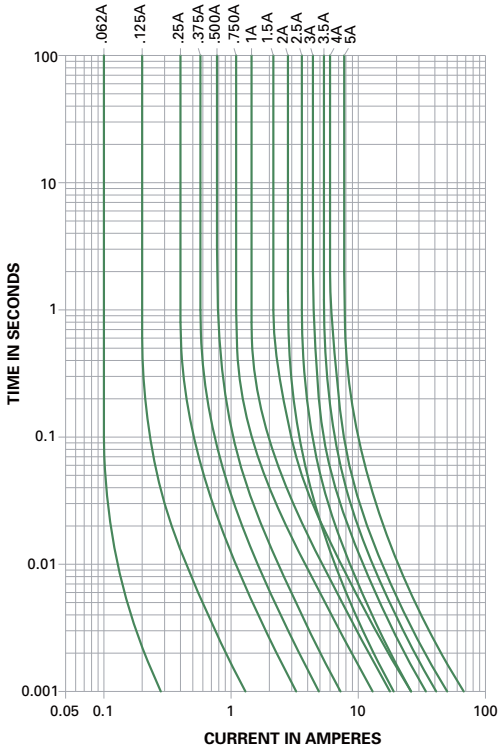
Temperature Rerating Curve



Note:

1. Rerating depicted in this curve is in addition to the standard rerating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters

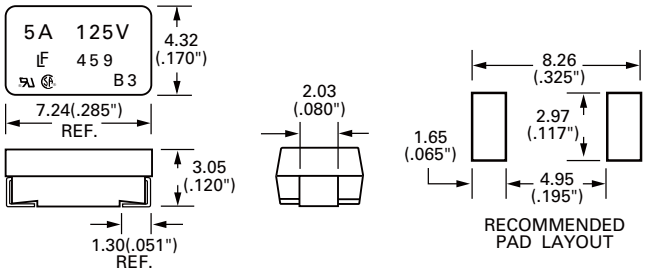
Wave Soldering	260°C, 10 seconds max.
Reflow Soldering	260°C, 30 seconds max.

Product Characteristics

Materials	**Body:** Molded Thermoplastic **Terminations:** 100% Tin-plated Copper (459 Series)
Solderability	MIL-STD-202, Method 208
Product Marking	**Body:** Brand Logo, Current Rating, Voltage Rating, Series Code, Date Code, Agency Approved Logo
Moisture Sensitivity Level	Level 1 J-STD - 020C

Operating Temperature	–55°C to 125°C
Shock	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 msecs.)
Vibration	MIL-STD-202, Method 201 (10–55 Hz, 0.06 inch total excursion)
Salt Spray	MIL-STD-202, Method 101, Test Condition B (48 hours)
Insulation Resistance (After Opening)	MIL-STD-202, Method 302, (10,000 ohms minimum at 100 volts)
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (–65 to 125°C)
Moisture Resistance	MIL-STD-202, Method 106, High Humidity (90-98 RH), Heat (65°C)

Dimensions



Part Numbering System

0459 .500 UR

SERIES

AMP Code
Refer to Electrical Characteristics table

QUANTITY Code
UR = 500 pcs
ER = 2500 pcs

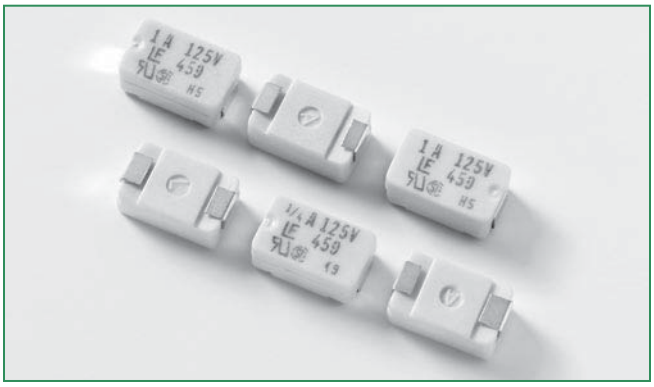
PACKAGING Code
R = Tape and Reel

Example:
0.62 Amp product is 0459 **.062** UR (.5 Amp product shown above).

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
12mm Tape and Reel	EIA RS-481-1 (IEC 286, part 3)	500	UR
12mm Tape and Reel	EIA RS-481-1 (IEC 286, part 3)	2500	ER

RoHS HF 460 Series PICO® Slo-Blo® Surface Mount Fuse



Description

The 460 Series Slo-Blo® SMF is based on Littelfuse PICO® fuse through-hole technology, though offered in a surface mount package.

This series of devices meets the requirements of the RoHS directive.

Features

- Slow-Blow
- High inrush current withstand capability
- Wide current rating range: 0.375A to 5A
- Wide operating temperature range
- RoHS compliant

Applications

- Wireless basestation
- Network equipment
- Telecom equipment

Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
	E10480	0.375A - 5A
	LR29862	0.375A - 5A
	NBK181103-E10480	1A - 5A

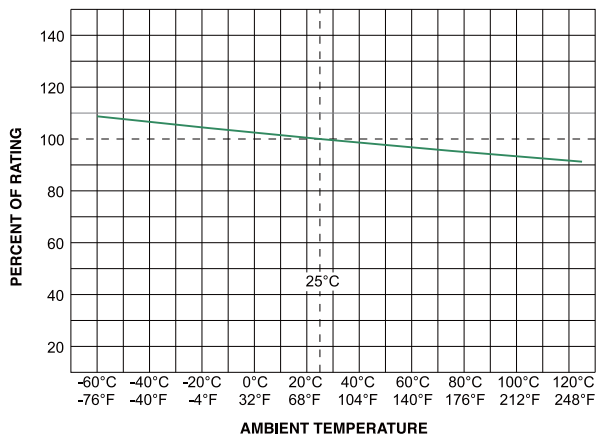
Electrical Characteristics for Series

% of Ampere Rating	Opening Time
100%	4 hours, Minimum
200%	1 second, Min.; 120 seconds, Max.
300%	0.2 second, Min.; 3 seconds, Max.
800%	0.02 second, Min.; 0.1 second, Max.

Electrical Specifications by Item

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I^2t (A^2sec)	Agency Approvals		
0.375	.375	125	50 A @125 VAC 50 A @125 VDC	1.7400	0.085	x	x	
0.500	.500	125		1.1900	0.210	x	x	
0.750	.750	125		0.4970	0.760	x	x	
1.00	001.	125		0.2800	2.01	x	x	x
1.50	01.5	125		0.1160	3.94	x	x	x
2.00	002.	125		0.0710	7.60	x	x	x
2.50	02.5	125		0.0520	13.0	x	x	x
3.00	003.	125		0.0380	21.0	x	x	x
3.50	03.5	125		0.0240	26.8	x	x	x
4.00	004.	125		0.0194	35.0	x	x	x
5.00	005.	125		0.0133	54.8	x	x	x

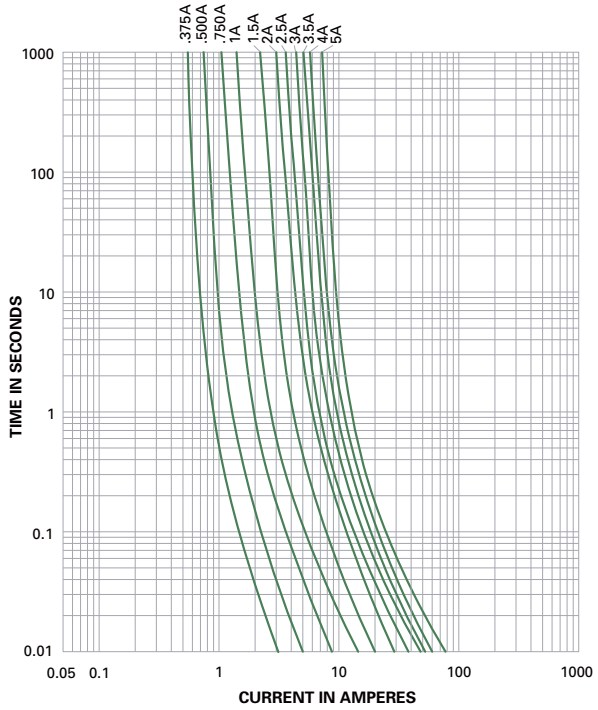
Temperature Rerating Curve



Note:

1. Rerating depicted in this curve is in addition to the standard rerating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters

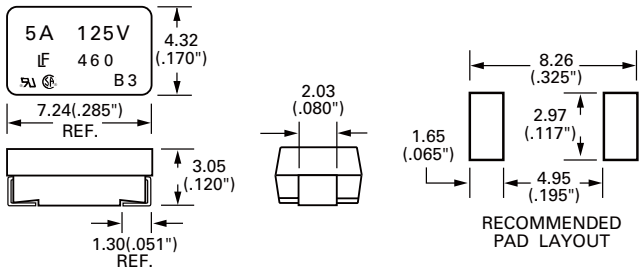
Wave Soldering	260°C, 3 seconds max.
Reflow Soldering	230°C, 30 seconds max.

Product Characteristics

Materials	**Body:** Molded Thermoplastic **Terminations:** 100% Tin-plated Copper (460 Series)
Solderability	MIL-STD-202, Method 208
Product Marking	**Body:** Brand Logo, Current Rating, Voltage Rating, Series Code, Date Code, Agency Approved Logo
Moisture Sensitivity Level	Level 1 J-STD - 020C

Operating Temperature	–55°C to 125°C
Shock	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 msecs.)
Vibration	MIL-STD-202, Method 201 (10–55 Hz, 0.06 inch total excursion)
Salt Spray	MIL-STD-202, Method 101, Test Condition B (48 hours)
Insulation Resistance (After Opening)	MIL-STD-202, Method 302, (10,000 ohms minimum at 100 volts)
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (–65°C to 125°C)
Moisture Resistance	MIL-STD-202, Method 106, High Humidity (90-98 RH), Heat (65°C)

Dimensions



Part Numbering System

0460 .500 UR

SERIES

AMP CODE
Refer to Electrical Characteristics table

QUANTITY CODE
UR = 500 pcs
ER = 2500 pcs

PACKAGING CODE
R = Tape and Reel

Example:
1 Amp product is 0460 **.001** UR (.5 Amp product shown above).

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
12mm Tape and Reel	EIA RS-481-1 (IEC 286, part 3)	500	UR
12mm Tape and Reel	EIA RS-481-1 (IEC 286, part 3)	2500	ER