📶 Littelfuse

434 Series Fuse





Agency A	pprovals	
Agency	Agency File Number	Ampere Range
1R ®	E10480	250mA - 3A
S ₽∘	LR29862	250mA - 3A

Electrical Characteristics for Series

% of Ampere Rating	Opening Time at 25°C
100%	4 hours, Minimum
200%	5 seconds, Maximum.
300%	0.2 seconds, Maximum

Description

The 434 series fast-acting surface mount fuse series is an ultra small (0603 size) thin-film device designed for secondary protection of circuits used in space constrained applications such as hand-held portable electronic devices.

For RoHS compliant and lead-free design, please refer to the Littelfuse 467 series thin film fuse.

Features

- The SlimLine 0603 fuse is an extremely small, low profile design (0603 chip size) utilizing thin-film technology to achieve precise control of electrical characteristics.
- The lower height profile produces a flat surface for improved performance in pick-and-place operations and an alternate solution for height critical applications.

Applications

Secondary protection for space constrained applications such as:

Cell phonesBattery packs

• Digital cameras

- DVD players
- Hard disk drives.

Electrical Specifications by Item

Ampere		Max		Nominal Cold	Nominal	Agency A	pprovals
Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Rating	Resistance (Ohms)	Melting I²t (A²sec)	17.	()
0.250	.250	32		0.3750	0.0030	Х	х
0.375	.375	32		0.2650	0.0053	Х	х
0.500	.500	32		0.1903	0.0087	Х	х
0.680	.680	32	50A @32 V AC/DC	0.1250	0.0109	Х	х
0.750	.750	32		0.1140	0.0171	Х	Х
1.00	001.	32		0.0720	0.0212	X	х
1.25	1.25	32		0.0540	0.0320	Х	Х
1.50	01.5	32		0.0480	0.0526	Х	х
1.75	1.75	32		0.0390	0.0661	Х	Х
2.00	002.	32		0.0360	0.1040	X	х
2.50	02.5	32	35A @32 V AC/DC	0.0280	0.1750	Х	Х
3.00	003.	32		0.0230	0.1980	X	х
3.50	03.5	32		0.0190	0.2650	х	Х
4.00	004.	32		0.0170	0.3520	Х	х
5.00	005.	32		0.0130	1.2970	Х	Х

1. Measured at 10% of rated current, 25°C.

2. Measured at rated voltage.

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Specifications are subject to change without notice. Please refer to www.littelfuse.com for the most current information



Temperature Rerating Curve

Average Time Current Curves





Soldering Parameters - Wave Soldering

Reflow Condition		Pb – Free assembly	
	-Temperature Min (T _{s(min)})	150°C	
Pre Heat	-Temperature Max (T _{s(max)})	200°C	
	-Time (Min to Max) (t _s)	60 – 180 secs	
Average ra (T _L) to pea	amp up rate (LiquidusTemp k	5°C/second max	
$T_{S(max)}$ to T_L	- Ramp-up Rate	5°C/second max	
D (I	- Temperature (T _L) (Liquidus)	217°C	
Reflow	-Temperature (t _L)	60 – 150 seconds	
PeakTemp	erature (T _P)	250 ^{+0/-5} °C	
Time within 5°C of actual peak Temperature (t _p)		20 – 40 seconds	
Ramp-dov	vn Rate	5°C/second max	
Time 25°C	to peakTemperature (T _P)	8 minutes Max.	
Do not exc	ceed	260°C	





Product Characteristics

Materials	Body: Epoxy Substrate Terminations: 100% Tin over Nickel over Copper Element Cover Coat: Conformal Coating
Operating Temperature	– 55°C to 90°C. Consult temperature rerating curve chart. For operation above 90°C contact Littelfuse.
Humidity	MIL-STD-202F Method 103B Condition D

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		
Resistance to Soldering Heat	Withstands 60 seconds above 200°C and up to 260°C, maximum		

Part Marking

Marking Code	Amp Code
D	.250
E	.375
F	.500
X	.680
G	.750
Н	001.
J	1.25
К	01.5
L	1.75
N	002.
0	02.5
Р	003.
R	03.5
S	004.
Т	005.

Part Numbering System



AMP CODE

QUANTITY CODE

Packaging				
	Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
	8mm Tape and Reel	EIA RS-481-2 (IEC 286, part 3)	5000	NR

1.60 (.063") .127

Dimensions



WAVE SOLDER



X

.305

(.012")

Coating

-

.279