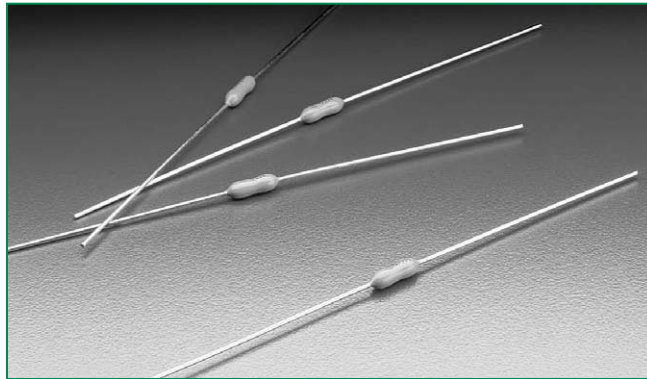


RoHS 251/253 Series, PICO® II, Very Fast-Acting Fuse



Description

The PICO® II very fast-acting fuse is designed to meet an extensive array of performance characteristics in a space-saving subminiature package.

Features

- Very fast acting
- Small size
- Wide current rating range (62mA- 15A)
- RoHS compliant
- Wide operating temperature range
- Low temperature de-rating

Applications

Secondary protection for space constrained applications

- Flat Panel Display TV
- LCD monitor
- LCD backlight inverter
- Office machines
- Power supply
- Audio/Video system
- Lighting system
- Medical equipment

Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time
100%	1/16–15	4 hours, Minimum
200%	1/16–7	1 sec., Maximum
	10	3 sec., Maximum
	12-15	10 sec., Maximum

Agency Approvals

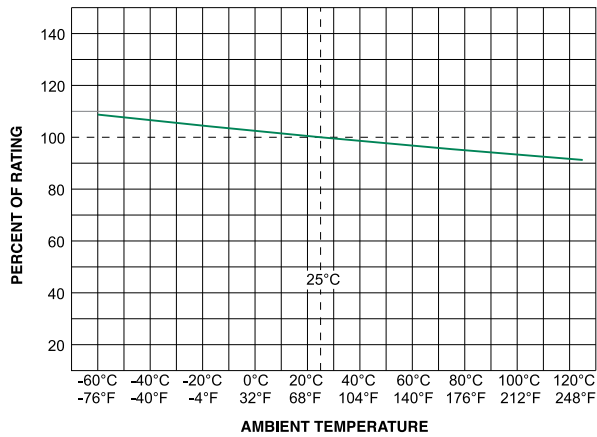
Agency	Agency File Number	Ampere Range
	E10480	62mA - 15A
	LR 29862	62mA - 15A
	JET 1896-31007-1001	1A - 5A
	J02037794	500mA - 10A

Electrical Characteristics

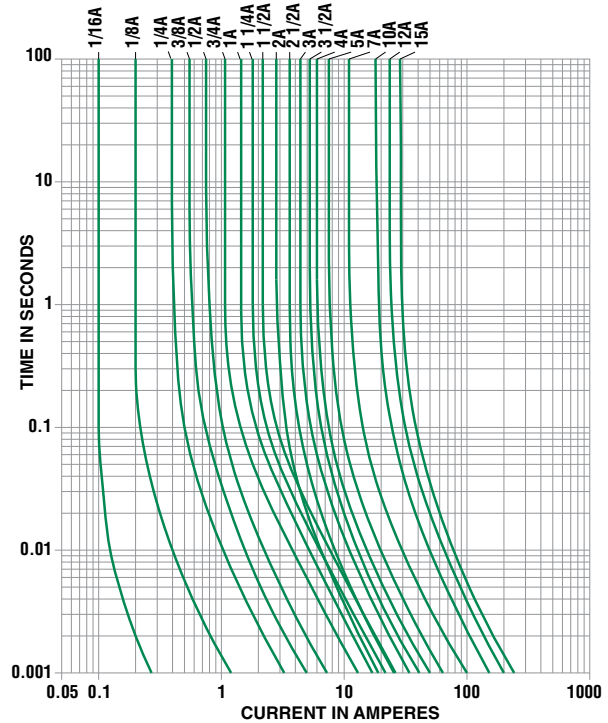
Ampere Rating (A)	Amp Code	Ordering Number (Std.)	Ordering Number (Mil.)	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	Nom Voltage Drop (mV)	Agency Approvals			
												
1/16	.062	251.062	253.062	125	300 amperes at rated voltage VDC	7.000	0.000113	1.4	x	x		
1/8	.125	251.125	253.125	125		1.700	0.00174	0.285	x	x		
1/4	.250	251.250	253.250	125		0.665	0.0116	0.24	x	x		
3/8	.375	251.375	253.375	125		0.395	0.0296	0.215	x	x		
1/2	.500	251.500	253.500	125		0.280	0.0598	0.2165	x	x		x
3/4	.750	251.750	253.750	125		0.175	0.153	0.176	x	x		x
1	001.	251001.	253001.	125		0.128	0.256	0.194	x	x	x	x
1 1/4	1.25	2511.25	2531.25	125		0.100	0.390	0.2	x	x	x	x
1 1/2	01.5	25501.5	25301.5	125		0.0823	0.587	0.21	x	x	x	x
2	002.	251002.	253002.	125		0.0473	0.405	0.141	x	x	x	x
2 1/2	02.5	25102.5		125	50 amperes at rated voltage VAC	0.0360	0.721	0.132	x	x	x	x
3	003.	251003.	253003.	125		0.0290	1.19	0.131	x	x	x	x
3 1/2	03.5	25103.5		125		0.0240	1.58	0.1205	x	x	x	x
4	004.	251004.	253004.	125		0.0204	2.45	0.114	x	x	x	x
5	005.	251005.	253005.	125		0.0155	4.14	0.11	x	x	x	x
7	007.	251007.	253007.	125		0.0105	10.4	0.102	x	x	x	x
10	010.	251010.	253010.	125		0.00705	25.5	0.1	x	x	x	x
12	012.	251012.		32		0.0055	45.2	0.0878	x	x	x	
15	015.	251015.	253015.	32		0.00446	68.8	0.071	x	x	x	

Note: Higher ampere ratings are available. Please contact Littelfuse Technical Support or your Littelfuse products representative for assistance.

Temperature Derating Curve

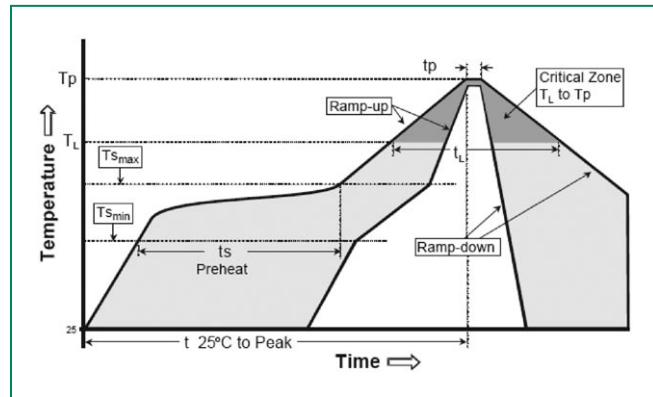


Average Time Current Curves



Soldering Parameters - Wave Soldering

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 Temperature (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, 10 sec. max.

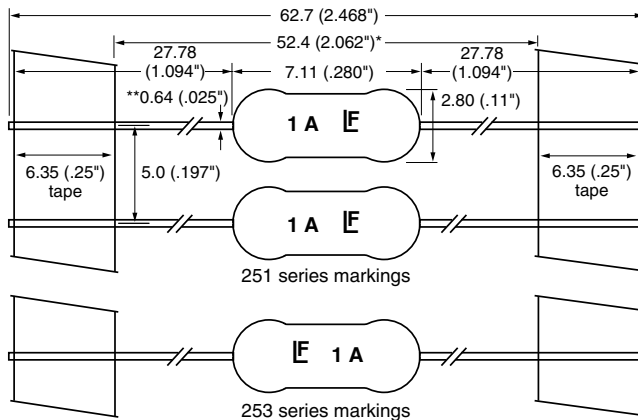


Product Characteristics

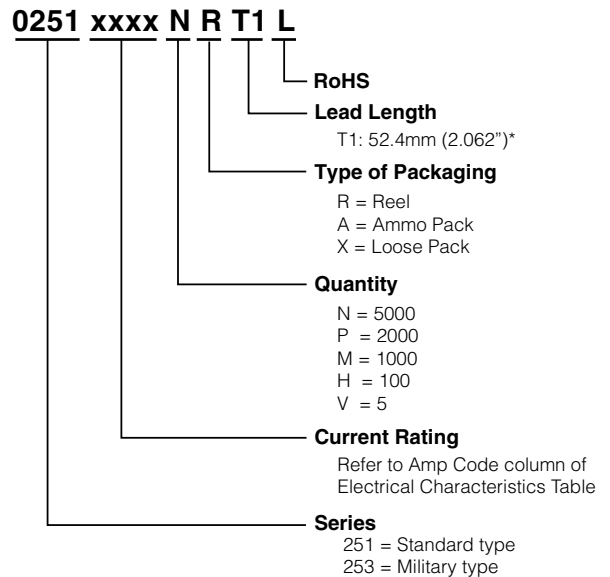
Materials	Encapsulated, Epoxy-Coated Body: Wire Leads. Pure Tin coated copper wire leads
Solderability	MIL-STD-202, Method 208
Lead Pull Force	MIL-STD-202, Method 211, Test Condition A (will withstand a 7 lb. axial pull test).
Moisture Sensitivity Level	J-STD 020 MSL Rating 2

Operating Temperature	–55°C to 125°C
Shock	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds)
Vibration	MIL-STD-202, Method 201 (10–55 Hz); Method 204, Test Condition C (55–2000 Hz at 10 G's Peak)
Moisture Resistance	MIL-STD-202, Method 106
Resistance to Soldering Heat	Withstands 60 seconds above 200°C and up to 260°C, maximum
Flammability Rating	UL 94V0

Dimensions



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity & Packaging Code
*T1: 52.4mm (2.062") Tape and Reel	EIA 296	Please refer to available quantities above in "Part Numbering System"

Notes: * T1 dimension is defined as the length of the component between the two tapes. The full component length is 62.7mm (2.468").
 ** .025" diameter for 1/16–10A, .032" diameter for 12–15A.