

Description

The Surface Mount Nano2® 250 V UMF product family complies with IEC 60127-4 which covers Universal Modular Fuse-Links [UMF]. This is an IEC standard that is accepted world wide.

Features & Benefits

- Listed to IEC 60127-4, Universal Modular Fuse-Links (UMF)
- 250VAC Voltage rating
- RoHS compliant and Halogen Free

Additional Information



Resources



Accessories



Samples

Applications

- Power supply
- Lighting system
- White goods
- Industrial equipment

Agency Approvals

Agency	Agency File Number	Ampere Range			
PS	NBK030205-E10480B	1 A - 5 A			
PS	NBK101105-E184655	6.3 A			
(L)	E184655	0.25 A - 6.3 A			
UK CA	NA	1 A - 6.3 A			
(€	NA	1 A - 6.3 A			
c %L °us E10480		1 A - 6.3 A			

Electrical Characteristics for Series

% of Ampere Rating	Opening Time
125%	1 hour, Minimum
200%	2 minutes, Maximum
1000%	0.01 sec., Min.; 0.1 sec., Max.

Electrical Specifications by Item

Amnere Reting	Max Interrupting	Nominal Cold	Nominal Melting	Agency Approvals						
(A)	Amp Code	Voltage Rating (V)	Rating Resistance (Ohms)	I ² t (A ² sec)	UK CA	Œ	⟨PS⟩	(L)	c FL °us	
1.00	001.	250		0.1070	2.5	X	X	X	X	X
1.25	1.25	250		0.0830	5.6	X	X	X	X	X
1.60	01.6	250	100A@250VAC	0.0560	9.0	X	X	X	X	X
2.00	002.	250		0.0390	14.4	X	X	X	X	X
2.50	02.5	250		0.0260	19.6	X	X	X	X	X
3.15	3.15	250		0.0210	32.4	X	X	X	X	X
4.00	004.	250		0.0160	48.4	X	X	X	X	X
5.00	005.	250		0.0130	90.0	X	X	X	X	X
6.30	06.3	250		0.0088	144.4	X	X	X	Х	X

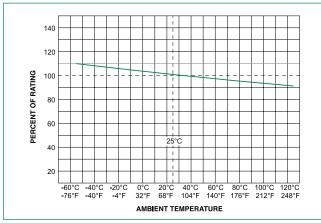
Notes:

- I2t calculated at 8ms.
- Resistance is measured at 10% of rated current, 25°C
- For information and availability of additional ratings please contact Littelfuse



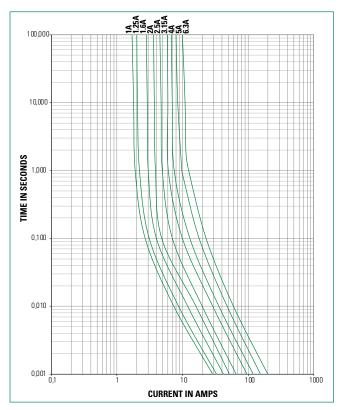
465 SeriesNANO2® > 250V UMF Time Lag Fuse

Temperature Re-rating Curve



Note: Rerating depicted in this curve is in addition to the standard derating of 15% for continuous operation.

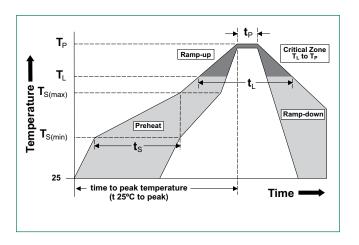
Average Time Current Curves



Soldering Parameters

Reflow Cond	dition	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 ram peak	np up rate (Liquidus Temp (T _L) to	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 secs		
Peak Temperature (T _p)		260 ^{+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		







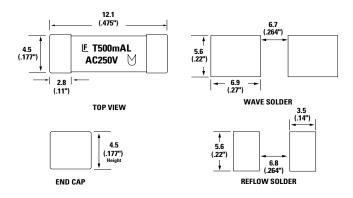
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Product Characteristics

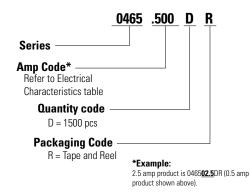
Materials	Body: High Performance Ceramic Terminations: Silver plated brass.		
Product Marketing	Brand, Ampere Rating, Voltage Rating, UMF Logo		
Operating Temperature	–55°C to 125°C		
Moisture Sensitivity Level	J-STD-020, Level 1		
Solderability	IEC 60127-4		
Insulation Resistance (after opening	IEC 60127-4 (0.1Mohm min @ 500VDC)		
Shock	MIL-STD-202, Method 213, Test Condition A		

Thermal Shock	MIL-STD-202, Method 107, Test Condition B , 5 cycles, –65°C to 125°C
Mechanical Shock	MIL-STD-202, Method 213, Test Condition A
Vibration	MIL-STD-202, Method 201 (10-55 Hz)
Moisture Resistance	MIL-STD-202, Method 106, 10 cycles
Salt Spray	MIL-STD-202, Method 101, Test Condition B (48hrs)
Resistance to Soldering Heat	IEC 60127-4

Dimensions



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
24mm Tape and Reel	EIA RS-481-1 (IEC 60286-3)	1500	DR

