

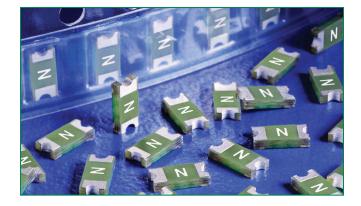
466 Series 1206 Fast-Acting Fuse











Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
71	E10480	0.125A - 5A
(P)	29862	0.125A - 5A

Electrical Characteristics for Series

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

Additional Information







Resources



Samples

Description

The 466 Series Fast-Acting Surface Mount Fuse (SMF) is a small (1206 size) thin-film device designed for secondary protection of circuits used in space constrained applications such as hand-held portable electronic devices.

This series is 100% lead-free and meets the requirements of the RoHS directive. New Halogen-Free 466 Series fuses are available to order using the "HF" suffix. See Part Numbering section for additional information.

Features

- Product is compatible with lead-free solders and higher temperature profiles
- Product is marked on top surface with code to allow amperage rating identification without testing
- Low profile for height sensitive applications
- Flat top surface for pickand-place operations

- Element-covering material is resistant to industry standard cleaning operations
- Lead-free, Halogen-free and RoHS compliant

Applications

Secondary protection for space constrained applications:

- Cell phones
- DVD players
- Battery packs
- · Hard disk drives
- Digital cameras

Electrical Specifications by Item

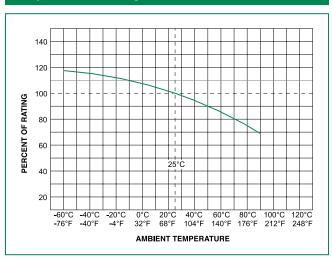
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A²sec)	Nom Voltage Drop (mV)	Nom Power Dissipation (W)	Agency A	opprovals
0.125	.125	125		3.925	0.00064	634.37	0.0793	Х	Х
0.200	.200	125	50A @125 V AC/	1.100	0.00055	254.28	0.0509	Х	X
0.250	.250	125	DC	0.691	0.0022	207.01	0.0518	Х	Х
0.375	.375	125		0.351	0.0045	169.18	0.0634	Х	X
0.500	.500	63		0.248	0.0060	158.47	0.0792	Х	Х
0.750	.750	63	50A @63 V AC/DC	0.106	0.0276	98.65	0.0740	Х	Х
1.00	001.	63		0.075	0.0423	79.97	0.0800	Х	×
1.25	1.25	63		0.057	0.0640	85.71	0.1071	Х	X
1.50	01.5	63		0.046	0.1103	82.97	0.1244	Х	Х
1.75	1.75	63		0.038	0.1835	80.73	0.1413	Х	×
2.00	002.	63		0.030	0.2326	78.73	0.1575	Х	Х
2.50	02.5	32		0.023	0.3516	76.99	0.1925	Х	Х
3.00	003.	32	EOA @22 \/ AC/DC	0.019	0.5760	75.99	0.2280	Х	Х
4.00	004.	32	50A @32 V AC/DC	0.014	1.764	74.50	0.2980	Х	X
5.00	005.	32		0.011	2.500	73.75	0.3688	Х	X

¹ Measured at 10% of rated current 25°C

^{2.} Measured at rated voltage



Temperature Re-rating Curve



Note:

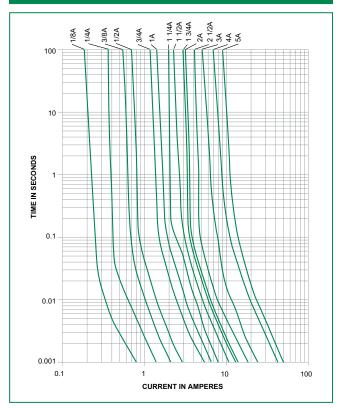
 Re-rating depicted in this curve is in addition to the standard re-rating of 25% for continuous operation.

Example:

For continuous operation at 70 degrees celsius, the fuse should be rerated as follows: $I = (0.75)(0.80)I_{RAT} = (0.60)I_{RAT}$

The temperature derating curve represents the nominal conditions. For questions about temperature derating curve, please consult Littelfuse technical support for assistance.

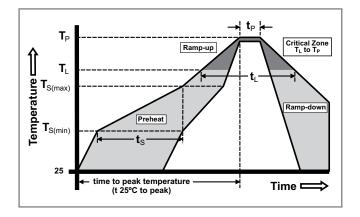
Average Time Current Curves



Soldering Parameters

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 seconds		
Average F	Ramp-up Rate (Liquidus Temp ak)	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		
PeakTemp	perature (T _P)	260+ ^{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 ex	ceed	260°C		





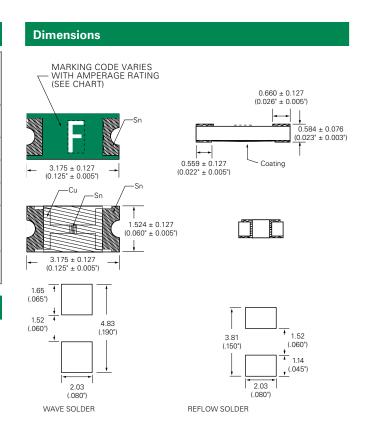


duct :				

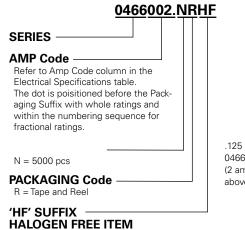
Materials	Body: Advanced High Temperature Substrate Terminations: 100% Tin over Nickel over Copper Element Cover Coat: Conformal Coating			
Operating Temperature	– 55°C to 90°C. Consult temperature re-rating curve chart.			
Thermal Shock	Withstands 5 cycles of -55°C to 125°C			
Humidity	MIL-STD-202, Method 103, Condition D			
Vibration	MIL-STD-202, Method 201			
Insulation Resistance (After Opening) Greater than 10,000 ohms				
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition D			

Part Marking System

Amp Code	Marking Code		
.125	В		
.200	С		
.250	D		
.375	E		
.500	F		
.750	G		
001.	Н		
1.25	J		
01.5	K		
1.75	L		
002.	N		
02.5	0		
003.	P		
004.	S		
005.	Т		



Part Numbering System



.125 amp product is 0466.125NRHF (2 amp product shown above).

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
8mm Tape and Reel	EIA-481 Rev. D (IEC 60286, part 3)	5000	NR