

Type 10F

High Current Brick Fuse



Description

- High current brick fuse
- Surface mount design to save space
- Ceramic square body with end cap
- Designed to GB9364.7 UL248-1/13
- Fully compatible with lead-free solder and high temperature profile



Applications

- Telecom power supply
- Cloud computing supply
- Server storage system
- Battery management system
- Energy storage system

Electrical Characteristics for Series

Rating Current	100% of Ampere Rating	200% of Ampere Rating	350% of Ampere Rating
20A~30A	4 Hour, Min	120Sec.Max	/
40A~100A	4 Hour, Min	/	10Sec.Max

Electrical Characteristic Specifications by Item

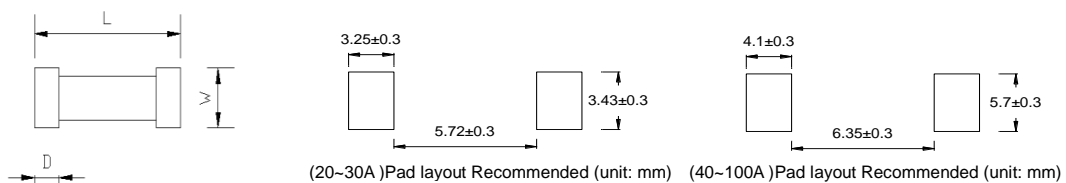
Part No	Rated Voltage(V)	Rated Current(A)	Breaking Capacity (A)	Melting Integral 10In min(A ² S)	Alpha Mark	Nominal Cold Resistance(mΩ)	Approvals
							CULUS
10F2200	125VAC 72VDC	20A	150A@250VAC	860	20	2.12	•
10F2250		25A		1343	25	1.7	•
10F2300		30A	250A@125VAC 1000A@72VDC	1548	30	1.5	•
10F2400		40A		2880	40	1.05	•
10F2500	125VAC 72VDC	50A	250A@125VAC	3500	50	0.71	•
10F2600		60A		10000	60	0.6	•
10F2800		80A	1000A@72VDC	8400	80	0.42	•
10F3100		100A		12980	100	0.36	•

*DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

*DC Cold Resistance are measured at <10% of rated current in ambient temperature of 23 degrees

Dimension

Current	L (mm)	D(mm)	W(mm)
20~30A	10.25±0.2	1.9±0.2	3.15±0.3
40~100A	12±0.5	2.7±0.2	4.5±0.3



Recommend trace thickness is 3oz, the minimum trace width is 10mm (20A~30A) and 15mm (40A~100A).

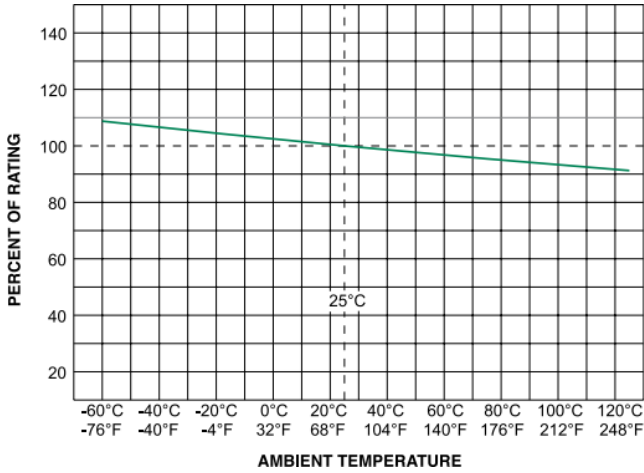
Type 10F

High Current Brick Fuse

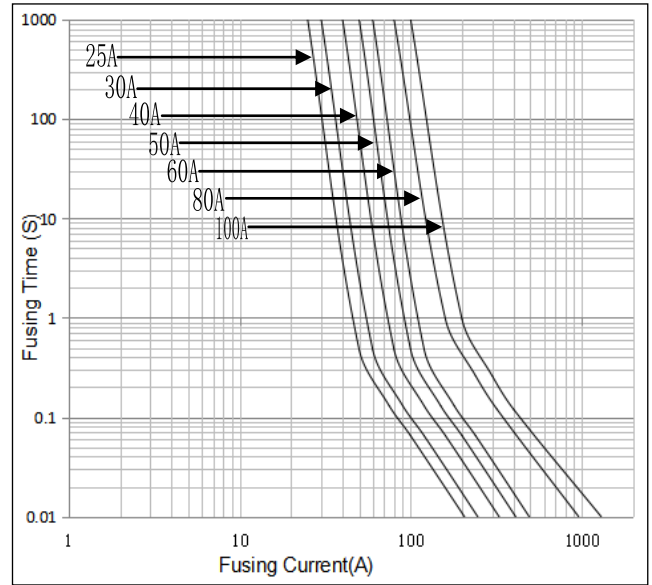


Temperature Re-rating Curve

*Operating temperature: -55 ~ 125°C, with proper correction factor applied



I-T Characteristics Curve

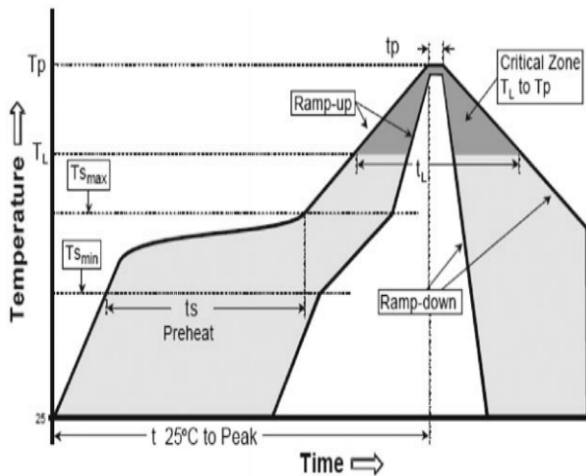


Product Characteristics

1	Product Marking	Brand name, Rated Current a
2	Operating Temperature	- 55°C to 125°C
3	Solder-ability	MIL - STD - 202, Method 208 T=240°C±5°C,t=3sec±0.5sec,Coverage≥95%
4	Resistance to Soldering Heat	MIL - STD - 202, Method 210,Test Condition B 10 sec at 260°C
5	Insulation Resistance(after Opening)	MIL - STD - 202, Method302,Test Condition A 10,000 ohms minimum,
6	Thermal Shock	MIL - STD - 202, Method 107,Test Condition B (5 cycles - 65°C to 125°C)
7	Mechanical Shock	MIL - STD - 202, Method 213,Test I 100G Peak for 6 ms,3cycles
8	Vibration	MIL - STD - 202, Method 201 0.03" amplitude,10 - 55Hz in 1min,2hrs each
9	Humidity	MIL - STD - 202, Method 103, Test Condition A 95%RH and 40°C for 240 hours
10	Salt Spray	MIL - STD - 202, Method 101Test Condition B 5% Salt solution,48 hours

Solder reflow profile

- 1)Infrared Reflow: • Temperature: 260°C • Time: 5sec Max. • Recommend Reflow profile
- 2)Hand Soldering: • Temperature: 350°C • Time: 3sec Max. • Avoid Soldering iron touch with Brass Cap



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate(Tsmax to Tp)	3°C/sec Max.
Preheat	
Temperature Min(Tsmin)	150°C
Temperature Max(Tsmax)	200°C
Time(Tsmin to Tsmax)	60sec ~ 120sec
Peak Temperature(Tp)	260°C
Time within 5°C of actualPeakTemperature(Tp)	5sec
Melting tin time(TL)	20sec ~ 40sec
Ramp-Down Rate	6°C/sec Max
Time 25°C to Peak Temperature	8 min Max.
Do not exceed 260°C	260°C

Type 10F
High Current Brick Fuse



Packaging

Packaging Option	Packaging Specification	Quantity
20A-30A	24mm tape-and-reel	2000PCS
40A-100A	24mm tape-and-reel	1500PCS

Product Identification

Type	Rated current(A)	Rated voltage(V)
10F	20A-100A	72V

【Part Numbering System】 :

