Fast Acting High Current Brick Fuse
Ampere Rating 15-100A

1240FH Series

Descriptions

- Fast Acting High current brick fuse
- Surface mount deign to save space
- Ceramic Suqare body with end cap design
- Designed to UL248-1/14



Electrical Characteristics

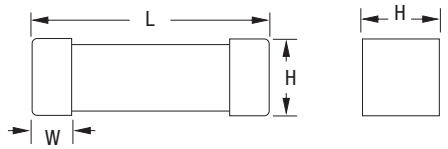
Amp Rating	% of Amp Rating	Opening Time
15~100A	1.0 In	4 hour min.
15~50A	2.5 In	<10s
60~100A	3.5 In	<10s

Specifications

Part No.	Rated Current (A)	Rated Voltage (V)	Breaking Capacity (A) [1]	Typ. Cold Resistance (mΩ) [2]	Typical Voltage Drop (mV)	Pre-Arcing I^2t (A^2Sec) [3]
1240FH-15A	15	250Vac 80Vdc	150A@250Vac 800A@80Vdc	4.6	120	250
1240FH-20A	20	250Vac 100Vdc[4]	150A@250Vac 300A@100Vdc	2.9	105	20
1240FH-25A	25	80Vdc	800A@80Vdc	2.25	125	50
1240FH-30A	30	100Vdc 80Vdc	300A@100Vdc 800A@80Vdc	1.5	100	90
1240FH-30AH	30	80Vdc	800A@80Vdc	1.35	90	180
1240FH-40A	40	250Vac 125Vac 80Vdc [5] 72Vdc	300A@250Vac 500A@125Vac 1000A@80Vdc 1000A@72Vdc	1.1	100	280
1240FH-50A	50	125Vac 80Vdc 72Vdc	500A@125Vac 1000A@80Vdc 1000A@72Vdc	0.95	105	480
1240FH-60A	60			0.6	75	900
1240FH-80A	80	125Vac 72Vdc	500A@125Vac 1000A@72Vdc	0.44	65	1700
1240FH-100A	100			0.29	55	5000

1. AC Interrupting Rating (Measured at designated voltage, 100% power factor random closing)
2. DC Interrupting Rating (Measured at designated voltage, time constant of less than 50 microseconds, battery source)
3. Typical Pre-arcing I2t are measured at 10In Current, DC battery bank, but not exceeding the interrupting rating, time constant of calibrated circuit less than 50 microseconds)
4. Internal qualification for 20A-30A @ 100Vdc, UL Approval is pending
5. Internal qualification for 40A-60A @ 80Vdc, UL Approval is pending

Dimension Unit: mm

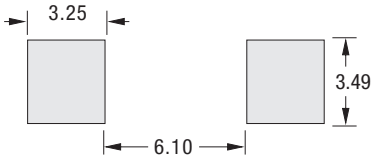


Amp Rating	L	W	H
15~30A	10.0±0.50	1.7±0.20	3.15±0.20
40~100A	12.30±0.40	2.70±0.20	4.50±0.20

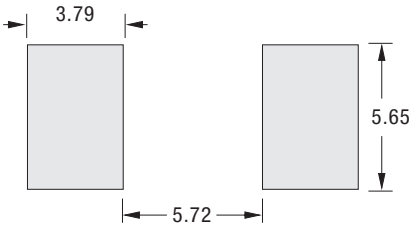
Packaging

- 20A-30A: 1500pcs fuses in tape (width 24mm) and reel (dia. 13inch);
- 40A-100A: 1000pcs fuses in tape (width 24mm) and reel (dia. 13inch)

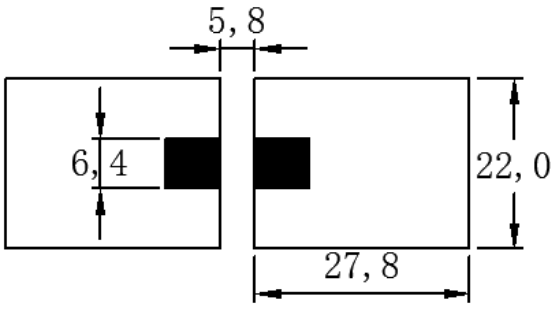
Pad layout



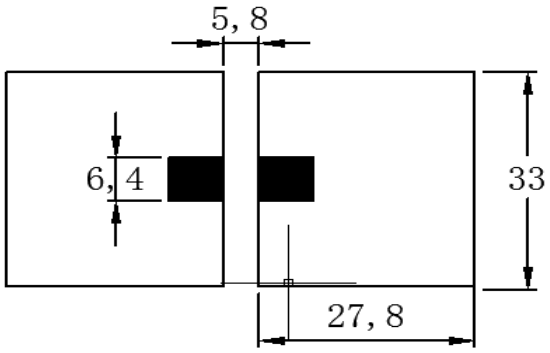
15~30A



40~50A



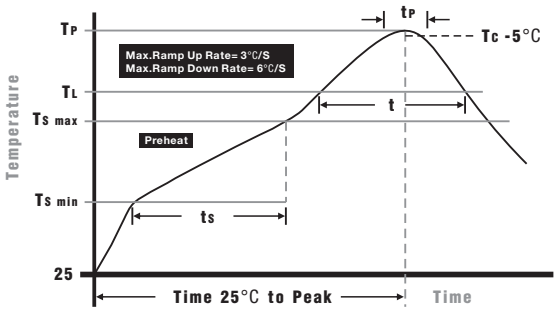
60~70A



80~100A

15A-30A: Recommend trace thickness is 3oz; the minimum trace width is 10mm
40A-50A: Recommend trace thickness is 3oz; the minimum trace width is 15mm
60A-70A: Recommend trace thickness is 3oz; the minimum trace width is 22mm
80A-100A: Recommend trace thickness is 6oz; the minimum trace width is 33mm
Recommend stencil thickness is 0.15mm;

Soldering Parameters

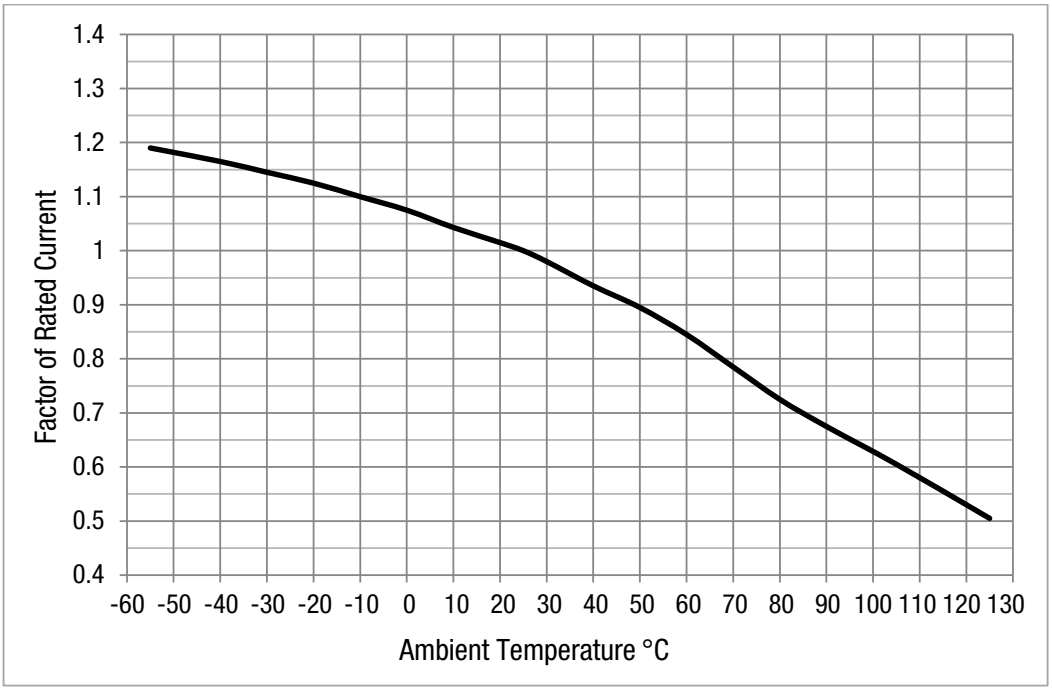


Infrared Reflow Soldering: 260°C, 30 seconds max.

IR Reflow Profile

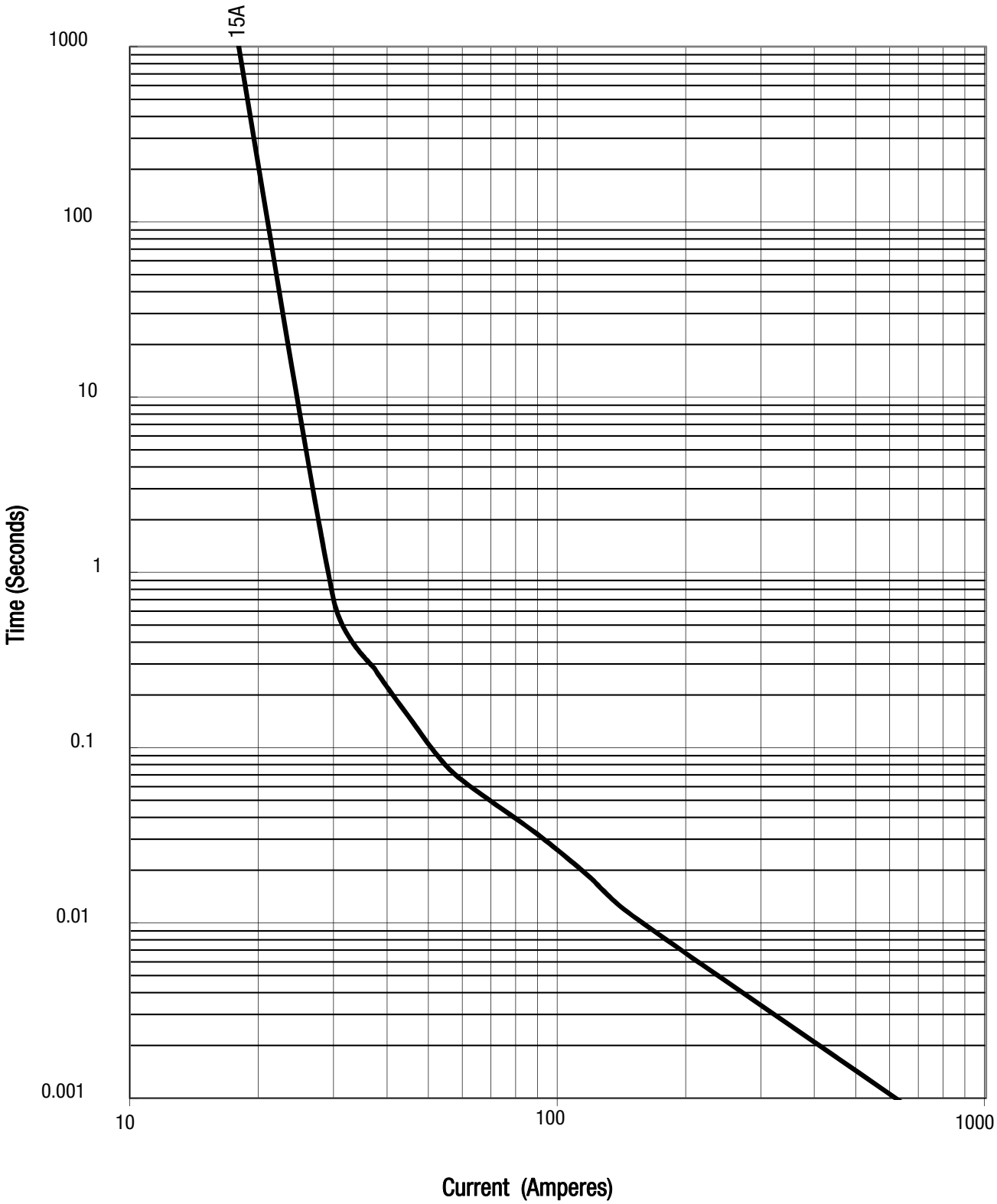
Preheat Heat **Temperature min (Tsmin)** **Temperature max(Tsmax)** **Time (Tsmin to Tsmax) (ts)**	150 °C 200°C 60 -120 seconds
Average ramp-up rate (Tsmax to Tp)	3°C/second max.
Liquidous temperature (TL) **Time at liquidous (tL)**	217 °C 60 - 150 seconds
Peak temperature(Tp)	260°C
Time within 5°C of actual peak Temperature (tp)	30 seconds
Average ramp-down rate (Tp to Tsmax)	6°C/second max.
Time 25 °C to peak temperature	8 minutes max.

Temperature Re-rating Curve



- Normal Operating Temperature: 25°C± 2°C
- Operating Temperature: -55°C to 125°C with proper correction factor applied.
- Chart of correction factor.

Time-Current Curves



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