



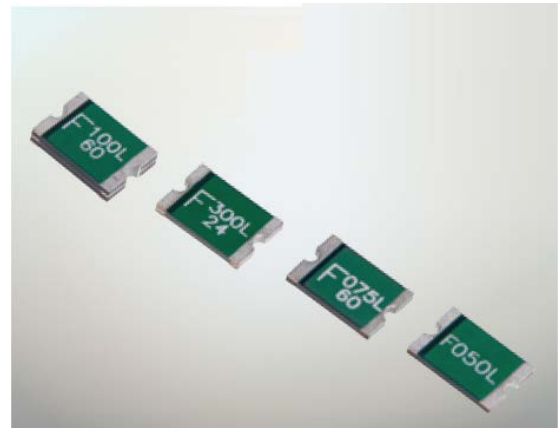
Product Features: 2920 Dimension, Surface mountable, Solid state, Faster time to trip than standard SMD devices.

Operation Current: 0.30A~5.00A

Maximum Voltage: 6V_{DC}~60V_{DC}

Temperature Range: -40°C to 85°C

Applications: All high-density boards



Electrical Characteristics (23°C)

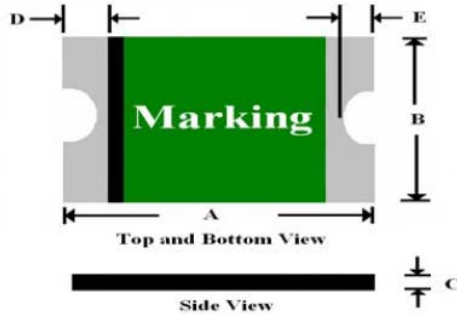
Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance	
						Current	Time	R _{MIN}	R _{1MAX}
	I _H , A	I _T , A	V _{MAX} , V _{DC}	I _{MAX} , A	P _d , W	A	Sec	Ohms	Ohms
F2920L030	0.30	0.60	60	100	1.5	1.5	3.0	1.000	4.800
F2920L050	0.50	1.00	60	100	1.5	2.5	4.0	0.300	1.400
F2920L075	0.75	1.50	33	100	1.5	8.0	0.3	0.180	1.000
F2920L075-60	0.75	1.50	60	100	1.5	8.0	0.3	0.180	1.000
F2920L100	1.10	2.20	33	100	1.5	8.0	0.5	0.090	0.410
F2920L100-60	1.00	2.00	60	100	1.5	8.0	0.5	0.090	0.410
F2920L125	1.25	2.50	33	100	1.5	8.0	2.0	0.050	0.250
F2920L150	1.50	3.00	33	100	1.5	8.0	2.0	0.050	0.230
F2920L185	1.85	3.70	33	100	1.5	8.0	2.5	0.040	0.150
F2920L200	2.00	4.00	16	100	1.5	8.0	4.5	0.035	0.120
F2920L200-24	2.00	4.00	24	100	1.5	8.0	5.0	0.035	0.120
F2920L250	2.50	5.00	16	100	1.5	8.0	16.0	0.025	0.085
F2920L260	2.60	5.20	6	100	1.5	8.0	20.0	0.020	0.075
F2920L260-24	2.60	5.20	24	100	1.5	8.0	20.0	0.020	0.075
F2920L300	3.00	5.20	6	100	1.5	8.0	25.0	0.010	0.048
F2920L300-15	3.00	5.20	15	100	1.5	8.0	20.0	0.010	0.048
F2920L300-24	3.00	5.20	24	100	1.5	8.0	20.0	0.010	0.048
F2920L400-16	4.00	8.00	16	100	1.5	20.0	4.0	0.010	0.040
F2920L500-16	5.00	10.00	16	100	1.5	20.0	5.0	0.005	0.025

Thermal Derating for PPTC Device at Various Ambient Temperatures

Temperatures	-40°C	-20°C	0°C	23°C	30°C	40°C	50°C	60°C	70°C	85°C
Current Derating %	158%	138%	119%	100%	90%	81%	72%	60%	50%	36%



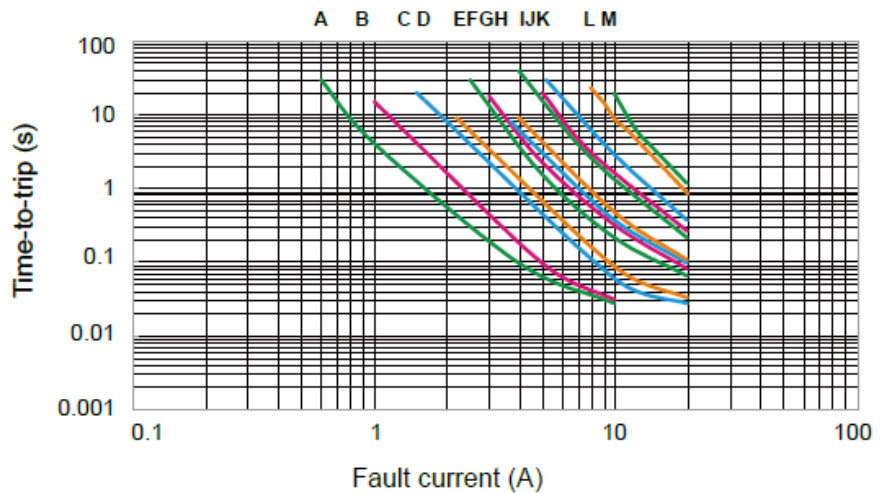
Product Dimensions (Millimeters)



Part Number	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
F2920L030	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
F2920L050	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
F2920L075	6.73	7.98	4.80	5.44	0.40	1.15	0.50	1.20	0.50	0.90
F2920L075-60	6.73	7.98	4.80	5.44	0.60	1.15	0.50	1.20	0.50	0.90
F2920L100	6.73	7.98	4.80	5.44	0.40	1.00	0.50	1.20	0.50	0.90
F2920L100-60	6.73	7.98	4.80	5.44	0.40	1.70	0.50	1.20	0.50	0.90
F2920L125	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
F2920L150	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
F2920L185	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
F2920L200	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
F2920L200-24	6.73	7.98	4.80	5.44	0.20	0.80	0.50	1.20	0.50	0.90
F2920L250	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
F2920L260	6.73	7.98	4.80	5.44	0.30	0.90	0.50	1.20	0.50	0.90
F2920L260-24	6.73	7.98	4.80	5.44	0.65	1.15	0.50	1.20	0.50	0.90
F2920L300	6.73	7.98	4.80	5.44	0.40	0.90	0.50	1.20	0.50	0.90
F2920L300-15	6.73	7.98	4.80	5.44	0.40	1.15	0.50	1.20	0.50	0.90
F2920L300-24	6.73	7.98	4.80	5.44	0.65	1.15	0.50	1.20	0.50	0.90
F2920L400-16	6.73	7.98	4.80	5.44	0.40	1.50	0.50	1.20	0.50	0.90
F2920L500-16	6.73	7.98	4.80	5.44	0.40	1.50	0.50	1.20	0.50	0.90

Typical Time-To-Trip at 23°C

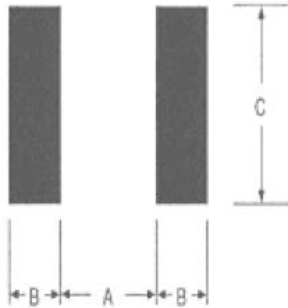
- A = F2920L030
- B = F2920L050
- C = F2920L075 / F2920L075-60
- D = F2920L100 / F2920L100-60
- E = F2920L125
- F = F2920L150
- G = F2920L185
- H = F2920L200 / F2920L200-24
- I = F2920L250
- J = F2920L260 / F2920L260-24
- K = F2920L300 / F2920L300-15 / F2920L300-24
- L = F2920L400-16
- M = F2920L500-16





Pad Layouts, Solder Reflow and Rework Recommendations

The dimension in the table below provide the recommended pad layout for each F2920L device



Pad dimensions (millimeters)			
Device	A Nominal	B Nominal	C Nominal
All F2920L Series	5.10	2.30	5.60

Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (T _{smax} to T _p)	3°C/second max.
Preheat:	
Temperature Min (T _{smin})	150°C
Temperature Max (T _{smax})	200°C
Time (t _s T _{smin} to T _{smax})	60~180 seconds
Time maintained above:	
Temperature(T _L)	217°C
Time (t _L)	60~150 seconds
Peak/Classification Temperature(T _p):	260°C
Time within 5°C of actual Peak:	
Temperature (t _p)	20~40 seconds
Ramp-Down Rate:	6°C/second max.
Time 25°C to Peak Temperature:	8 minutes max.

Note 1: All temperatures refer to of the package, measured on the package body surface.

Solder reflow

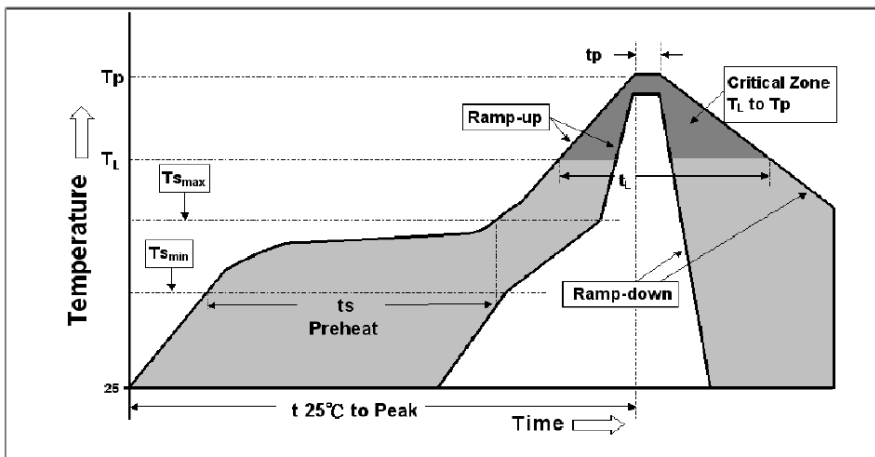
✗ Due to “Lead Free” nature, Temperature and Dwelling time for the soldering zone is higher than those for Regular. This may cause damage to other components.

1. Recommended max past thickness > 0.25mm.
2. Devices can be cleaned using standard methods and aqueous solvent.
3. Rework use standard industry practices.
4. Storage Environment: < 30°C / 60%RH

Caution:

1. If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.
2. Devices are not designed to be wave soldered to the bottom side of the board.

Reflow Profile



NOTE: Specification subject to change without notice.