

## Surface-Mount Devices | 2920 Size

## SRF2920 Series

### PTC Resettable Fuses

#### Features

- Resettable over current and over temperature protection
- Standard 2920mils footprint
- Fast time-to-trip
- RoHS compliant



#### Applications

- Automotive electronics
- PC motherboards, Hard disk driver, and PC peripherals
- POS Equipment
- LCD / LED HDTV
- USB port protection
- HDMI source protection



#### Electrical Characteristics

Part Number	$I_H$ (A)	$I_T$ (A)	$V_{max}$ (V)	$I_{max}$ (A)	Time to Trip		$Pd_{typ}$ (W)	$R_{min}$ ( $\Omega$ )	$R1_{max}$ ( $\Omega$ )
					(A)	(Sec)			
SRF2920P030	0.30	0.60	60	10	1.50	3.00	1.50	0.600	4.300
SRF2920P050	0.50	1.00	60	10	2.50	3.00	1.50	0.180	1.400
SRF2920P075	0.75	1.50	33	40	8.00	0.30	1.50	0.100	1.000
SRF2920P075/60	0.75	1.50	60	40	8.00	0.30	1.50	0.100	1.000
SRF2920P100	1.00	2.00	33	40	8.00	0.50	1.50	0.065	0.410
SRF2920P125	1.25	2.50	33	40	8.00	2.00	1.50	0.050	0.250
SRF2920P150	1.50	3.00	33	40	8.00	2.00	1.50	0.035	0.230
SRF2920P185	1.85	3.70	33	100	8.00	2.00	1.50	0.030	0.150
SRF2920P200	2.00	4.00	16	40	8.00	4.50	1.50	0.020	0.120
SRF2920P200/24	2.00	4.00	24	40	8.00	4.50	1.50	0.020	0.120
SRF2920P250	2.50	5.00	16	40	8.00	16.0	1.50	0.018	0.085
SRF2920P260	2.60	5.20	16	40	8.00	20.0	1.50	0.014	0.075
SRF2920P260/24	2.60	5.20	24	100	8.00	18.0	1.50	0.014	0.075
SRF2920P300	3.00	6.00	12	40	8.00	25.0	1.50	0.010	0.055
SRF2920P300/16	3.00	6.00	16	40	8.00	25.0	1.50	0.010	0.055
SRF2920P300/24T	3.00	6.00	24	100	8.00	20.0	1.50	0.010	0.055

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### Electrical Characteristics

Part Number	I <sub>H</sub> (A)	I <sub>T</sub> (A)	V <sub>max</sub> (V)	I <sub>max</sub> (A)	Time to Trip		Pd <sub>typ</sub> (W)	R <sub>min</sub> (Ω)	R1 <sub>max</sub> (Ω)
					(A)	(Sec)			
SRF2920P400/16	4.00	8.00	16	40	20.0	5.00	1.50	0.007	0.035
SRF2920P450	4.50	9.00	16	40	22.5	5.00	1.50	0.005	0.020
SRF2920P500	5.00	10.00	8	40	25.0	5.00	1.50	0.005	0.018
SRF2920P500/16	5.00	10.00	16	40	25.0	5.00	1.50	0.005	0.022

I<sub>H</sub> = Hold current: maximum current at which the device will not trip at 25°C still air.  
 I<sub>T</sub> = Trip current: minimum current at which the device will always trip at 25°C still air.  
 V<sub>max</sub> = Maximum continuous voltage device can withstand without damage at rated current  
 I<sub>max</sub> = Maximum fault current device can withstand without damage at rated voltage.

T<sub>trip</sub> = Maximum time to trip(s) at assigned current.  
 Pd<sub>typ</sub> = Typical power dissipation: typical amount of power dissipated by the device when in state air environment.  
 R<sub>min</sub> = Minimum resistance of device in initial (un-soldered) state.  
 R1<sub>max</sub> = Maximum resistance of device at 25°C measured one hour after reflow.

Noted: All electrical function test is conducted after PCB mounted.

### Thermal Derating Chart Hold Current (A)

Part Number	Ambient Operating Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SRF2920P030	0.45	0.40	0.35	0.30	0.25	0.23	0.20	0.17	0.14
SRF2920P050	0.76	0.67	0.59	0.50	0.42	0.38	0.33	0.29	0.23
SRF2920P075	1.13	1.01	0.88	0.75	0.62	0.56	0.50	0.44	0.34
SRF2920P075/60	1.13	1.01	0.88	0.75	0.62	0.56	0.50	0.44	0.34
SRF2920P100	1.66	1.47	1.29	1.00	0.91	0.83	0.73	0.64	0.50
SRF2920P125	1.89	1.68	1.46	1.25	1.04	0.94	0.83	0.73	0.56
SRF2920P150	2.27	2.01	1.76	1.50	1.25	1.13	1.00	0.87	0.74
SRF2920P185	2.80	2.47	2.17	1.85	1.54	1.39	1.22	1.07	0.85
SRF2920P200	3.02	2.68	2.34	2.00	1.80	1.70	1.54	1.40	1.30
SRF2920P200/24	3.02	2.68	2.34	2.00	1.80	1.70	1.54	1.40	1.30
SRF2920P250	3.78	3.35	2.93	2.50	2.25	2.13	1.93	1.75	1.63
SRF2920P260	3.93	3.48	3.04	2.60	2.34	2.21	2.00	1.82	1.69
SRF2920P260/24	3.93	3.48	3.04	2.60	2.34	2.21	2.00	1.82	1.69
SRF2920P300	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.75	1.34
SRF2920P300/16	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.75	1.34
SRF2920P300/24T	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.75	1.34
SRF2920P400/16	6.04	5.36	4.68	4.00	3.60	3.40	3.08	2.80	2.60
SRF2920P450	6.80	6.03	5.27	4.50	4.05	3.83	3.47	3.15	2.93

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## PTC Resettable Fuses

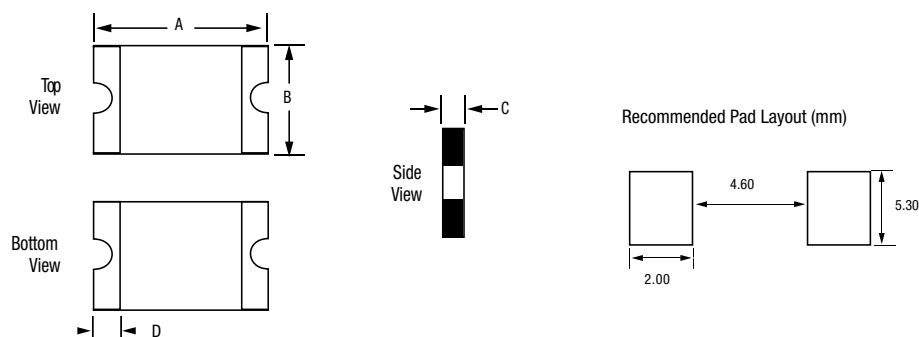
## SRF2920 Series

### Thermal Derating Chart Hold Current (A)

Part Number	Ambient Operating Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SRF2920P500	7.56	6.70	5.86	5.00	4.50	4.26	3.86	3.50	3.26
SRF2920P500/16	7.56	6.70	5.86	5.00	4.50	4.26	3.86	3.50	3.26

Notes: The temperature derating data is for reference only. Please contact PROSEMI technical support for detail temperature derating information.

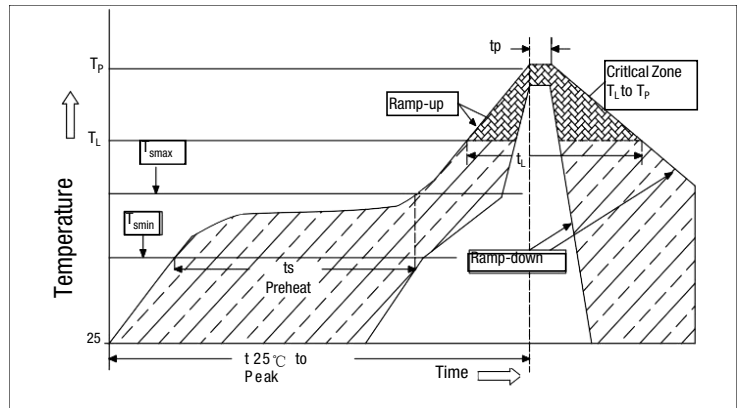
### Dimensions (mm)



Part Number	Marking	A		B		C		D
		Min.	Max.	Min.	Max.	Min.	Max.	Min.
SRF2920P030	T030	6.73	7.98	4.80	5.44	0.75	1.25	0.30
SRF2920P050	T050	6.73	7.98	4.80	5.44	0.75	1.25	0.30
SRF2920P075	T075	6.73	7.98	4.80	5.44	0.65	1.05	0.30
SRF2920P075/60	T075	6.73	7.98	4.80	5.44	1.00	1.50	0.30
SRF2920P100	T100	6.73	7.98	4.80	5.44	0.65	1.05	0.30
SRF2920P125	T125	6.73	7.98	4.80	5.44	0.65	1.05	0.30
SRF2920P150	T150	6.73	7.98	4.80	5.44	0.90	1.30	0.30
SRF2920P185	T185	6.73	7.98	4.80	5.44	0.90	1.30	0.30
SRF2920P200	T200	6.73	7.98	4.80	5.44	0.45	0.85	0.30
SRF2920P200/24	T200	6.73	7.98	4.80	5.44	0.90	1.30	0.30
SRF2920P250	T250	6.73	7.98	4.80	5.44	0.45	0.85	0.30
SRF2920P260	T260	6.73	7.98	4.80	5.44	0.45	0.85	0.30
SRF2920P260/24	T260	6.73	7.98	4.80	5.44	1.10	1.60	0.30
SRF2920P300	T300	6.73	7.98	4.80	5.44	0.45	0.85	0.30
SRF2920P300/16	T300	6.73	7.98	4.80	5.44	1.10	1.50	0.30
SRF2920P300/24T	T300	6.73	7.98	4.80	5.44	1.10	1.50	0.30
SRF2920P400/16	T400	6.73	7.98	4.80	5.44	1.10	1.50	0.30
SRF2920P450	T450	6.73	7.98	4.80	5.44	1.10	1.40	0.30
SRF2920P500	T500	6.73	7.98	4.80	5.44	0.80	1.20	0.30
SRF2920P500/16	T500	6.73	7.98	4.80	5.44	1.00	1.40	0.30

### Solder Reflow Conditions

<b>Reflow Profile</b>	Lead free
<b>Heating rate from T<sub>smax</sub> to T<sub>p</sub></b>	Max.3°C/second
<b>Pre-heat:</b> <b>T<sub>smin</sub></b> <b>T<sub>smax</sub></b> <b>T<sub>smin</sub> to T<sub>smax</sub></b>	150°C 200°C 60~180seconds
<b>Soldering time:</b> <b>Temperature (T<sub>L</sub>)</b> <b>Time (t<sub>L</sub>)</b>	>217°C 60~150seconds
<b>Peak temperature (T<sub>p</sub>)</b>	260°C
<b>Time at Peak temperature ±5°C (t<sub>p</sub>)</b>	20~40seconds
<b>Cooling rate</b>	Max.6°C/second
<b>Time from 25°C to Peak Temperature</b>	8 minutes max



#### Cautions for Reflow:

1. The printed solder thickness is not over 0.25mm. Excess solder may cause a short circuit, especially during hand soldering;
2. If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements;
3. Device can not be wave soldered. Please contact Prosemi for hand soldering and dip soldering recommendations;
4. Device can't contact solvent;

Note: All temperature in top chart is measured on the surface of devices.

### Packaging Options

I hold(A)	Quantity
0.30A~0.75A,1.00A~1.25A,2.00A,	1,500pcs
0.75A/60V,1.50A~1.85A,2.0A/24V,2.6A/24V,3.00A/16V~5.00A	1,000pcs
2.50A~2.60A,3.00A	2,000pcs

Reel packaging per EIA-481-1 standard

单击下面可查看定价，库存，交付和生命周期等信息

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