

### Surface-Mount Devices | 1812 Size

### **SRF1812 Series**

### **PTC Resettable Fuses**

#### **Features**

- Compact design saves board space
- · Fast response to fault currents
- Compatible with high temperature solders
- Low resistance
- Low-profile
- RoHS compliant, lead-free and halogen-free

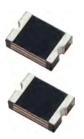






# **Applications**

- Computer
- Portable electronics
- Multimedia
- Game machines
- Telephony and broadband
- Mobile phones
- Automotive
- Industrial controls



### **Electrical Characteristics**

<b>5</b> . N . 1	$I_{H}$	$I_{T}$	$V_{\text{max}}$	$I_{\text{max}}$	Time	to Trip	$Pd_{typ}$	$R_{min}$	$R1_{\text{max}}$
Part Number	(A)	(A)	(V)	(A)	(A)	(Sec.)	(W)	$(\Omega)$	$(\Omega)$
SRF1812P200/30	2.00	4.00	30	40	8.0	2.00	0.8	0.020	0.120

 $I_{\text{M}}$  = Hold current: maximum current at which the device will not trip at 25  $^{\circ}$  still air reflow soldering of 260  $^{\circ}$  for 20 sec.

Value specified is determined by using the PWB with 0.030" \*1.5oz copper traces.

Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.

# Thermal Derating Chart Hold Current (A)

Dart Number				Ambien	t Operatin	g Temperat	ure		
Part Number	<b>-40</b> °C	<b>-20</b> °C	<b>0</b> °C	<b>25</b> °C	<b>40</b> °C	<b>50</b> °C	<b>60</b> °C	<b>70</b> °C	<b>85</b> °C
SRF1812P200/30	2.88	2.61	2.25	2.00	1.80	1.66	1.45	1.09	0.80

 $l_{T}$  = Trip current: minimum current at which the device will always trip at 25  $^{\circ}$  still air reflow soldering of 260  $^{\circ}$  for 20 sec.

 $V_{\text{max}}$  = Maximum continuous voltage device can withstand without damage at rated current

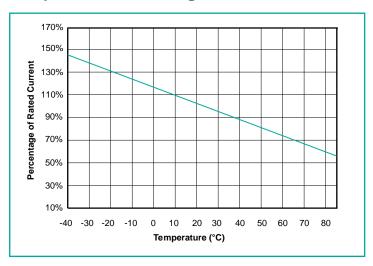
 $l_{max}$  = Maximum fault current device can withstand without damage at rated voltage.  $T_{ttp}$  = Maximum time to trip(s) at assigned current reflow soldering of 260  $^{\circ}$  C for 20 sec.

Potyp = Typical power dissipation: typical amount of power dissipated by the device when in state air environment

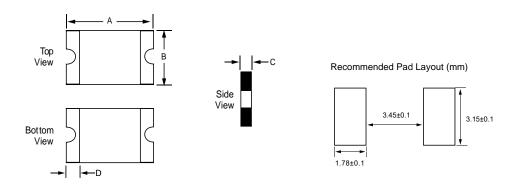
 $<sup>\</sup>mathbf{R}_{\min}$  = Minimum resistance of device in initial (un-soldered) state.

 $R1_{max}$  = Maximum resistance of device at 25  $^{\circ}$  measured one hour after reflow soldering of 260  $^{\circ}$  for 20 sec.

# **Temperature Rerating Curve**



### **Dimensions**



D. (Nl.)	А		E	3	С		D
Part Number	Min	Max	Min	Max	Min	Max	Min
SRF1812P200/30	4.37	4.73	3.07	3.41	0.60	1.50	0.30

# **Packaging Options**

hold(A)	Quantity
2.0A	1,500pcs

Reel packaging per EIA-481-1 standard

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