

## SCF030-2920RB Surface Mount PPTC Resettable Fuse RoHS Compliant Halogen Free

Our Product Introduction

### Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: UL, TUV, REACH, RoHS, ISO
- Model Number: SCF030-2920RB
- Minimum Order Quantity: 2000PCS
- Price: Negotiable
- Delivery Time: 5-8 work days



### Product Specification

- Product Name: PPTC Resettable Fuse
- Package Type: SMD2920
- I Hold: 0.3A
- I Trip: 0.6A
- V Max: 60V
- I Max: 100A
- P Dtyp.: 1.5W
- Maximum Time To Trip Current: 1.5A
- Maximum Time To Trip Time: 3Sec
- Resistance Min: 0.6Ω
- Resistance Max: 4.8Ω
- Highlight: RoHS PPTC Resettable Fuse,  
PPTC Resettable Fuse Halogen Free,  
RoHS Surface Mount Resettable Fuse



### More Images



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## Product Description

SCF030-2920RB Surface Mount Resettable Fuse PPTC RoHS Compliant & Halogen Free 0.30A Hold Current

DATASHEET: [SCF2920RB Series\\_v2110.1.pdf](#)

| Part Number      | Hold Current   | Trip Current   | Rated Voltage   | Max Current   | Typical Power   | Maximum Time To Trip |             | Resistance             |                         |
|------------------|----------------|----------------|-----------------|---------------|-----------------|----------------------|-------------|------------------------|-------------------------|
|                  | $I_{hold}$ (A) | $I_{trip}$ (A) | $V_{max}$ (Vdc) | $I_{max}$ (A) | $P_{dtyp.}$ (W) | Current (A)          | Time (Sec.) | $R_{min}$ ( $\Omega$ ) | $R_{1max}$ ( $\Omega$ ) |
| SCF030-2920RB    | 0.30           | 0.60           | 60.0            | 100           | 1.5             | 1.50                 | 3.00        | 0.60                   | 4.80                    |
| SCF050-2920RB    | 0.50           | 1.00           | 60.0            | 100           | 1.5             | 2.50                 | 4.00        | 0.18                   | 1.40                    |
| SCF075-2920RB    | 0.75           | 1.50           | 33.0            | 100           | 1.5             | 8.00                 | 0.30        | 0.10                   | 1.00                    |
| SCF075-60-2920RB | 0.75           | 1.50           | 60.0            | 40            | 1.5             | 8.00                 | 0.30        | 0.10                   | 1.00                    |
| SCF100-2920RB    | 1.00           | 2.20           | 33.0            | 100           | 1.5             | 8.00                 | 0.50        | 0.065                  | 0.41                    |
| SCF100-60-2920RB | 1.00           | 2.20           | 60.0            | 100           | 1.5             | 8.00                 | 0.50        | 0.065                  | 0.41                    |
| SCF125-2920RB    | 1.25           | 2.50           | 33.0            | 100           | 1.5             | 8.00                 | 2.00        | 0.05                   | 0.25                    |
| SCF150-2920RB    | 1.50           | 3.00           | 33.0            | 100           | 1.5             | 8.00                 | 2.00        | 0.035                  | 0.23                    |
| SCF185-2920RB    | 1.85           | 3.70           | 33.0            | 100           | 1.5             | 8.00                 | 2.50        | 0.030                  | 0.15                    |
| SCF200-2920RB    | 2.00           | 4.00           | 16.0            | 100           | 1.5             | 8.00                 | 4.50        | 0.020                  | 0.12                    |
| SCF200-24-2920RB | 2.00           | 4.00           | 24.0            | 100           | 1.5             | 8.00                 | 4.50        | 0.020                  | 0.12                    |
| SCF250-2920RB    | 2.50           | 5.00           | 16.0            | 100           | 1.5             | 8.00                 | 16.0        | 0.020                  | 0.085                   |
| SCF260-2920RB    | 2.60           | 5.20           | 16.0            | 100           | 1.5             | 8.00                 | 10.0        | 0.014                  | 0.075                   |
| SCF260-24-2920RB | 2.60           | 5.20           | 24.0            | 100           | 1.5             | 8.00                 | 18.0        | 0.014                  | 0.075                   |
| SCF300-2920RB    | 3.00           | 6.00           | 6.0             | 100           | 1.5             | 8.00                 | 20.0        | 0.012                  | 0.048                   |
| SCF300-16-2920RB | 3.00           | 6.00           | 16.0            | 100           | 1.5             | 8.00                 | 20.0        | 0.012                  | 0.048                   |
| SCF400-16-2920RB | 4.00           | 8.00           | 16.0            | 40            | 1.5             | 20.0                 | 4.00        | 0.008                  | 0.040                   |
| SCF500-16-2920RB | 5.00           | 10.00          | 16.0            | 40            | 1.5             | 25.0                 | 5.00        | 0.005                  | 0.031                   |
| SCF600-12-2920RB | 6.00           | 12.0           | 12.0            | 40            | 1.5             | 25.0                 | 6.00        | 0.004                  | 0.020                   |

$I_{hold}$  = Hold Current. Maximum current device will not trip in 25 still air.

$I_{trip}$  = Trip Current. Minimum current at which the device will always trip in 25 still air.

$V_{max}$  = Maximum operating voltage device can withstand without damage at rated current ( $I_{max}$ ).

$I_{max}$  = Maximum fault current device can withstand without damage at rated voltage ( $V_{max}$ ).

$P_{dtyp.}$  = Maximum power dissipation when device is in the tripped state in 25 still air environment at rated voltage.

$R_{min}$  = Minimum device resistance prior to tripping at 25.

$R_{1max}$  = Maximum device resistance is measured one hour post reflow.

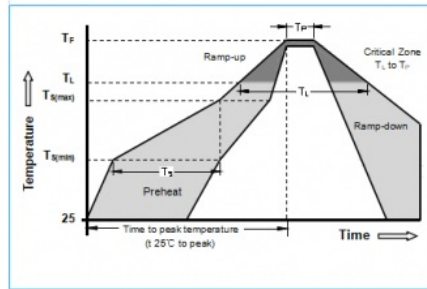
### Features:

- u RoHS Compliant & Halogen Free
- u Faster tripping, 2920 Dimension, Surface mountable, Solid state
- u Operation Current: 0.30A ~ 6.00A
- u Maximum Voltage: 6V ~ 60Vdc
- u Operating Temperature: -40 ~ + 85

| Model            | Maximum ambient operating temperature ( ) |      |      |      |      |      |      |      |      |
|------------------|-------------------------------------------|------|------|------|------|------|------|------|------|
|                  | -40                                       | -20  | 0    | 25   | 40   | 50   | 60   | 70   | 85   |
| SCF030-2920RB    | 0.44                                      | 0.37 | 0.35 | 0.30 | 0.28 | 0.23 | 0.20 | 0.18 | 0.14 |
| SCF050-2920RB    | 0.73                                      | 0.62 | 0.59 | 0.50 | 0.47 | 0.38 | 0.34 | 0.30 | 0.24 |
| SCF075-2920RB    | 1.09                                      | 0.92 | 0.88 | 0.75 | 0.70 | 0.56 | 0.50 | 0.45 | 0.36 |
| SCF075-60-2920RB | 1.09                                      | 0.92 | 0.88 | 0.75 | 0.70 | 0.56 | 0.50 | 0.45 | 0.36 |
| SCF100-2920RB    | 1.45                                      | 1.23 | 1.17 | 1.00 | 0.93 | 0.75 | 0.67 | 0.60 | 0.48 |
| SCF100-60-2920RB | 1.45                                      | 1.23 | 1.17 | 1.00 | 0.93 | 0.75 | 0.67 | 0.60 | 0.48 |
| SCF125-2920RB    | 1.81                                      | 1.54 | 1.46 | 1.25 | 1.16 | 0.94 | 0.84 | 0.75 | 0.60 |
| SCF150-2920RB    | 2.18                                      | 1.85 | 1.76 | 1.50 | 1.40 | 1.13 | 1.01 | 0.90 | 0.72 |
| SCF185-2920RB    | 2.68                                      | 2.28 | 2.16 | 1.85 | 1.72 | 1.39 | 1.24 | 1.11 | 0.89 |
| SCF200-2920RB    | 2.90                                      | 2.46 | 2.34 | 2.00 | 1.86 | 1.50 | 1.34 | 1.20 | 0.96 |
| SCF200-24-2920RB | 2.90                                      | 2.46 | 2.34 | 2.00 | 1.86 | 1.50 | 1.34 | 1.20 | 0.96 |
| SCF250-2920RB    | 3.63                                      | 3.08 | 2.93 | 2.50 | 2.33 | 1.88 | 1.68 | 1.50 | 1.20 |
| SCF260-2920RB    | 3.77                                      | 3.20 | 3.04 | 2.60 | 2.42 | 1.95 | 1.74 | 1.56 | 1.25 |
| SCF260-24-2920RB | 3.77                                      | 3.20 | 3.04 | 2.60 | 2.42 | 1.95 | 1.74 | 1.56 | 1.25 |
| SCF300-2920RB    | 4.35                                      | 3.69 | 3.51 | 3.00 | 2.79 | 2.25 | 2.01 | 1.80 | 1.44 |

|                  |      |      |      |      |      |      |      |      |      |
|------------------|------|------|------|------|------|------|------|------|------|
| SCF300-16-2920RB | 4.35 | 3.69 | 3.51 | 3.00 | 2.79 | 2.25 | 2.01 | 1.80 | 1.44 |
| SCF400-16-2920RB | 5.80 | 4.92 | 4.68 | 4.00 | 3.72 | 3.00 | 2.68 | 2.40 | 1.92 |
| SCF500-16-2920RB | 7.25 | 6.15 | 5.85 | 5.00 | 4.65 | 3.75 | 3.35 | 3.0  | 2.4  |
| SCF600-12-2920RB | 8.7  | 7.38 | 7.02 | 6.00 | 5.58 | 4.5  | 4.02 | 3.6  | 2.88 |

#### Soldering Parameters



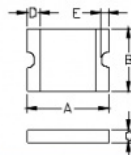
| Profile Feature                                                                                                                               | Pb-Free Assembly                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Average Ramp-Up Rate (T <sub>1</sub> max to T <sub>p</sub> )                                                                                  | 3°C/second max.                  |
| Preheat :<br>Temperature Min (T <sub>25min</sub> )<br>Temperature Max (T <sub>1max</sub> )<br>Time (T <sub>25min</sub> to T <sub>1max</sub> ) | 150°C<br>200°C<br>60-120 seconds |
| Time maintained above:<br>Temperature (T <sub>1</sub> )<br>Time (T <sub>1</sub> )                                                             | 217°C<br>60-150 seconds          |
| Peak/Classification Temperature (T <sub>p</sub> )                                                                                             | 260°C                            |
| Time within 5 °C of actual peak temperature: Time (T <sub>p</sub> )                                                                           | 30 seconds max.                  |
| Ramp-down Rate                                                                                                                                | 3°C / second max.                |
| Time 25°C to Peak Temperature                                                                                                                 | 8 minutes max.                   |

- Recommended reflow methods: In, vapor phase oven, hot air oven, N<sub>2</sub> environment for lead-free.
  - Devices are not designed to be wave soldered to the bottom side of the board.
  - Recommended maximum paste thickness is 0.25mm (0.010inch).
  - Devices can be cleaned using standard industry methods and solvents.
  - Soldering temperature profile meets RoHS leadfree process.
- Note 1: All temperature refer to topside of the package, measured on the package body surface.  
Note 2: If reflow temperature exceed the recommended profile, devices may not meet the performance requirements.

#### Part Numbering

|                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>SCF XXX - XX - 2920 RB</b></p> <p>Internal Code</p> <p>Device Size Code</p> <p>Rated Voltage</p> <p>Hold Current</p> <p>Socay Product Code</p> | <p>Example</p> <p>SC 030L</p> <p>SC030L = SCF030-2920RB<br/>SC050L = SCF050-2920RB<br/>SC075L = SCF075-2920RB<br/>SC075L = SCF075-60-2920RB<br/>SC100L = SCF100-2920RB<br/>SC100L = SCF100-60-2920RB<br/>SC125L = SCF125-2920RB<br/>SC150L = SCF150-2920RB<br/>SC185L = SCF185-2920RB<br/>SC200L = SCF200-2920RB</p> <p>SC200L = SCF200-24-2920RB<br/>SC250L = SCF250-2920RB<br/>SC260L = SCF260-2920RB<br/>SC260L = SCF260-24-2920RB<br/>SC300L = SCF300-2920RB<br/>SC300L = SCF300-16-2920RB<br/>SC400L = SCF400-16-2920RB<br/>SC500L = SCF500-16-2920RB<br/>SC600L = SCF600-12-2920RB</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Product Dimensions (Unit: mm)



| Part Number      | A    |      | B    |      | C    |      | D    | E    |
|------------------|------|------|------|------|------|------|------|------|
|                  | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Min. |
| SCF030-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.15 | 0.30 | 0.15 |
| SCF050-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.15 | 0.30 | 0.15 |
| SCF075-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.15 | 0.30 | 0.15 |
| SCF075-60-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.80 | 1.60 | 0.30 | 0.15 |
| SCF100-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.00 | 0.30 | 0.15 |
| SCF100-60-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.70 | 1.50 | 0.30 | 0.15 |
| SCF125-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.00 | 0.30 | 0.15 |
| SCF150-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.20 | 0.30 | 0.15 |
| SCF185-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.20 | 0.30 | 0.15 |
| SCF200-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.40 | 0.80 | 0.30 | 0.15 |
| SCF200-24-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.20 | 0.30 | 0.15 |
| SCF250-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.40 | 0.80 | 0.30 | 0.15 |
| SCF260-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.40 | 0.80 | 0.30 | 0.15 |
| SCF260-24-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.40 | 1.20 | 0.30 | 0.15 |
| SCF300-2920RB    | 6.73 | 7.98 | 4.80 | 5.44 | 0.40 | 0.80 | 0.30 | 0.15 |
| SCF300-16-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.20 | 0.30 | 0.15 |
| SCF400-16-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.20 | 0.30 | 0.15 |
| SCF500-16-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.70 | 1.50 | 0.30 | 0.15 |
| SCF600-12-2920RB | 6.73 | 7.98 | 4.80 | 5.44 | 0.70 | 1.50 | 0.30 | 0.15 |

| Part Number      | Quantity | Part Number      | Quantity |
|------------------|----------|------------------|----------|
| SCF030-2920RB    | 2000 PCS | SCF200-24-2920RB | 1500 PCS |
| SCF050-2920RB    | 2000 PCS | SCF250-2920RB    | 2000 PCS |
| SCF075-2920RB    | 2000 PCS | SCF260-2920RB    | 2000 PCS |
| SCF075-60-2920RB | 1500 PCS | SCF260-24-2920RB | 1500 PCS |
| SCF100-2920RB    | 2000 PCS | SCF300-2920RB    | 2000 PCS |

|                  |          |                  |          |
|------------------|----------|------------------|----------|
| SCF100-60-2920RB | 1500 PCS | SCF300-16-2920RB | 1500 PCS |
| SCF125-2920RB    | 2000 PCS | SCF400-16-2920RB | 1500 PCS |
| SCF150-2920RB    | 2000 PCS | SCF500-16-2920RB | 1500 PCS |
| SCF185-2920RB    | 1500 PCS | SCF600-12-2920RB | 1500 PCS |
| SCF200-2920RB    | 2000 PCS | --               | --       |



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