



SinglFuse™ SF-2923UC-C Series Features

- Single blow fuse for overcurrent protection
- EIA 2923 (7358 metric) footprint
- Ultra-high current ceramic housing design
- UL 248-14 listed
- Surface mount packaging for automated assembly
- RoHS compliant* and halogen free**

SF-2923UC-C Series – Ultra-High Current SMD Fuses

Electrical Characteristics

Model	Rated Current (Amps)	Fusing Time	Resistance (Ω) Typ.***	Rated Voltage	Interrupting Rating	Typical I ² t (A ² s) ****
SF-2923UC20C-2	20	Open within 60 sec. at 250 % rated current	0.00200	80 VDC	450 A @ 80 VDC	108
SF-2923UC30C-2	30		0.00120			270
SF-2923UC40C-2	40		0.00100			416
SF-2923UC50C-2	50		0.00080			750
SF-2923UC60C-2	60		0.00065			1260
SF-2923UC80C-2	80		0.00055			3110
SF-2923UC100C-2	100		0.00040			7560

*** Resistance value measured with ≤10 % rated current at 25 °C ambient. Tolerance ±30 %.

**** 20 A – 60 A: Melting I²t calculated at 10 times rated current. 80 A – 100 A: Melting I²t calculated at 6 times rated current.

Reliability Testing

No.	Test	Test Condition	Requirement	Test Reference
1	Solderability	Temperature setup: 235 +0 / -5 °C Time setup: 10 sec.	After test terminal electrode wetting area must be greater than 95 %	IEC 68-2-58
2	Resistance to soldering heat	Temperature setup: 235 ±5 °C Time setup: 30 sec.	DCR change ≤ ±15 %	IEC 68-2-58
3	Thermal shock	Temperature setup: 25 °C ~ -65 °C ~ 25 °C ~ 125 °C Time setup: -65 °C (30 min) ~ 25 °C (5 min) ~ 125 °C (30 min) ~ 25 °C (5 min), 5 cycles	DCR change ≤ ±15 % No mechanical damage	MIL-STD-202G Method 107G Test Condition B
4	Humidity unload	Heat (85 ±0.5 °C) High Humidity (85 ±1 % RH) 240 hours	DCR change ≤ ±15 % No mechanical damage	MIL-STD-202G Method 103B Test Condition A
5	Salt spray	Salt spray concentration: 5 ±1 % Test liquid temperature: 35 ±0.5 °C 96 hours	DCR change ≤ ±15 % No mechanical damage	MIL-STD-202G Method 101E Test Condition A
6	Bending	The board shall be bent by 1 mm at a rate of 1 mm/sec.	DCR change ≤ ±15 %	IEC 60127-4
7	Vibration	Frequency setup: 10 ~ 55 ~ 10 Hz Time setup: 1 Minute/cycle (X-Y-Z, 120 cycles, 6 hours)	DCR change ≤ ±15 % No mechanical damage	MIL-STD-202G Method 201A



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

"SinglFuse" is a trademark of Bourns, Inc.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

SinglFuse™ SF-2923UC-C Series Applications

- Li-ion Battery Packs
- Energy Storage Systems (ESS)
- Power Tools
- Electric Assist Bicycles
- Servers and Routers
- Uninterruptible Power Supplies (UPS)
- Power Distribution Units (PDUs)
- Power Factor Correction (PFC)

SF-2923UC-C Series – Ultra-High Current SMD Fuses

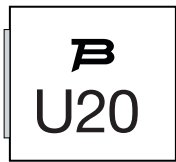
BOURNS®

Environmental Characteristics

Operating Temperature.....	-55 °C to +125 °C
Storage Conditions	
Temperature	+15 °C to +30 °C
Humidity.....	20 % to 70 %
Shelf Life.....	2 years from manufacturing date
Moisture Sensitivity Level	1
ESD Classification (HBM).....	Class 6

Typical Part Marking

Represents total content. Layout may vary.



Rated Current	Part Marking
20 A	U20
30 A	U30
40 A	U40
50 A	U50
60 A	U60
80 A	U80
100 A	U100

How to Order

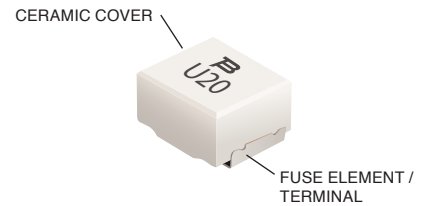
SF - 2923 UC 20 C - 2

SinglFuse™ _____
 Product Designator _____
 SMD Footprint _____
 2923 = EIA 2923
 (7358 metric)
 Fuse Blow Type _____
 UC = Ultra-High Current
 Rated Current _____
 20 ~ 100 (20 A ~ 100 A)
 Structure Type _____
 C = Ceramic Cube Housing
 Packaging Type _____
 - 2 = Tape & Reel

Agency Recognition

UL File Number E500949

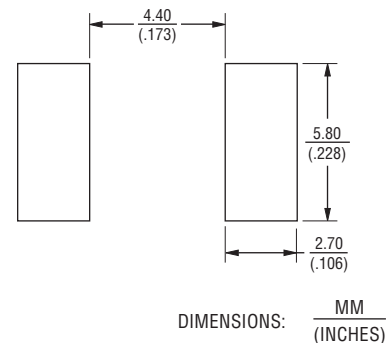
Construction



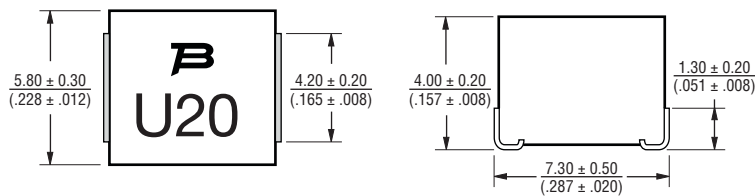
Packaging Quantity

1,000 pieces per 13-inch reel

Recommended Pad Layout



Product Dimensions



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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