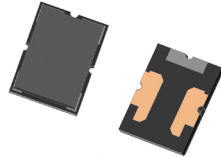


# SCF4030

## 4.0 mm x 3.0 mm Surface mount self-control fuse



### Product features

- Surface mount, 3 terminal fuse
- Provides overcurrent and overcharging protection
- Integrated thermal element provides triggerable operation
- Ideal for battery powered electronics
- A unique fusible device provides fast acting performance
- Moisture sensitivity level (MSL): 1

### Applications

- Notebook and laptop computing
- Handheld electric power tools
- Battery powered household appliances

### Agency information

cURus recognition file number:  
E19180, Guide JDYX2 and JDYX8

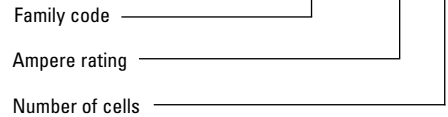


### Environmental compliance

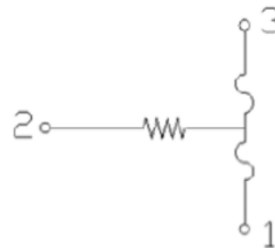
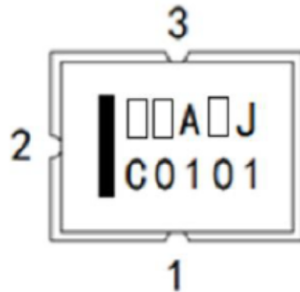


### Ordering part number

**SCF4030- 15 -01**



### Equivalent circuit diagram



### Electrical characteristics

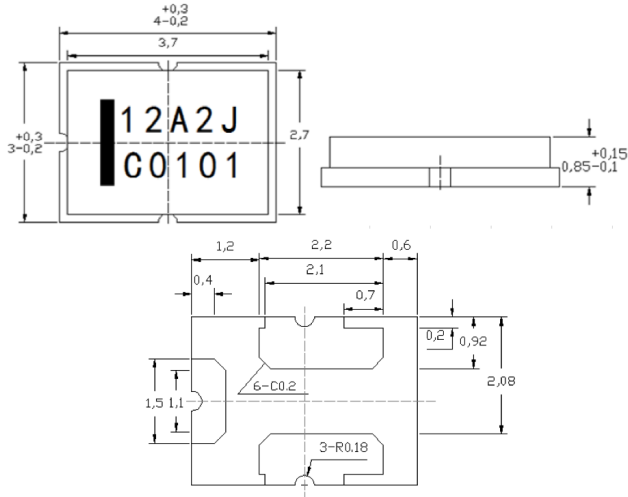
Condition of test	Opening time
100% of current rating	1 hour minimum
200% of current rating	60 seconds maximum
Operating voltage	60 seconds maximum

### Product specifications

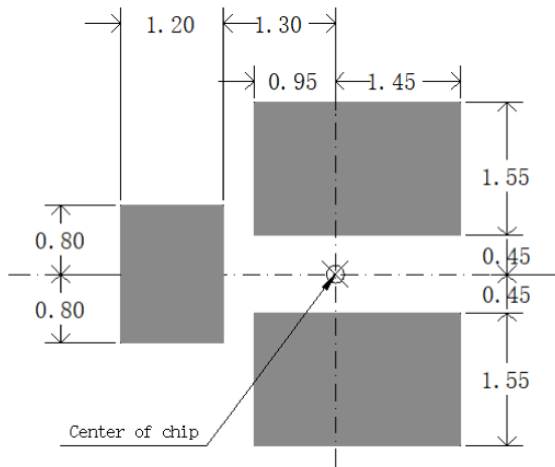
Part number	Current rating (A)	Voltage rating <sup>1</sup> (Vdc)	Heater DCR (Ω)	Operating voltage (V)	Breaking capacity (A)	Fuse DCR (mΩ)	Applicable cells in series	Part Marking	Agency approval cURus
SCF4030-12-01	12	36	0.6 - 1.5	3.0 – 4.5	50	1.0 – 3.5	1	12A1J	√
SCF4030-12-02	12	36	2.0 - 3.2	4.0 – 9.0	50	1.0 – 3.5	2	12A2J	√
SCF4030-12-03	12	36	5.7 - 9.9	7.4 – 13.8	50	1.0 – 3.5	3	12A3J	√
SCF4030-12-04	12	36	11.2 - 20.0	10.5 – 19.6	50	1.0 – 3.5	4	12A4J	√
SCF4030-12-05	12	36	17.0 - 34.0	14.4 – 23.5	50	1.0 – 3.5	5	12A5J	√
SCF4030-12-06	12	36	24.0 - 40.0	15.6 – 27.0	50	1.0 – 3.5	6	12A74	
SCF4030-12-67	12	36	30.0 - 50.0	17.4 – 32.9	50	1.5 - 3.5	6-7	12A7J	√
SCF4030-12-07	12	36	32.0 - 54.0	18.2 – 31.5	50	1.0 – 3.5	7	12A75	
SCF4030-12-08	12	36	39.0 - 65.0	20.3 – 36.0	50	1.5 – 3.5	8	12A72	
SCF4030-12-09	12	48	52.0 - 83.0	27.0 – 40.5	200	1.5 – 3.5	9	12A82	
SCF4030-12-10	12	48	65.0 - 100.0	30.0 – 45.0	200	1.5 – 3.5	10	12A83	
SCF4030-15-01	15	36	0.77 - 1.29	3.0 – 5.0	50	1.0– 3.0	1	15A1J	√
SCF4030-15-02	15	36	2.38 - 3.58	5.0 – 9.0	50	1.0 – 3.0	2	15A2J	√
SCF4030-15-03	15	36	5.44 - 8.16	7.4 – 13.8	50	1.0 – 3.0	3	15A3J	√
SCF4030-15-04	15	36	11.0 - 16.5	10.5 – 19.6	50	1.0 – 3.0	4	15A4J	√
SCF4030-15-05	15	36	15.0 - 20.2	12.0 – 21.5	50	1.0 – 3.0	5	15A5J	√
SCF4030-15-06	15	48	24.5 - 40.9	17.3 – 28.2	200	1.0 – 3.0	6	15A6J	√
SCF4030-15-07	15	48	36.0 - 56.0	20.2 – 32.9	200	1.0 – 3.0	7	15A7J	√
SCF4030-15-08	15	48	47.0 - 73.0	23.1 – 37.6	200	1.0 – 3.0	8	15A8J	√
SCF4030-15-10	15	48	74.0 - 105.0	25.0 – 47.0	200	1.0 – 3.0	10	15A82	
SCF4030-22-01	22	48	0.72 - 1.02	3.5 – 4.7	200	0.8 - 1.8	1	22A1J	√
SCF4030-22-02	22	48	2.29 - 3.30	6.0 – 9.2	200	0.8 - 1.8	2	22A2J	√
SCF4030-22-03	22	48	5.5 - 7.4	9.0 – 13.8	200	0.8 - 1.8	3	22A3J	√
SCF4030-22-04	22	48	9.75 - 13.25	12.0 – 18.5	200	0.8 - 1.8	4	22A4J	√
SCF4030-22-05	22	48	18.1 - 25.5	17.5 – 23.5	200	0.8 - 1.8	5	22A5J	√
SCF4030-22-06	22	48	22.0 - 30.0	18.0 – 27.0	200	0.8 - 1.8	6	22A52	
SCF4030-22-07	22	48	29.5 - 46.0	24.0 – 32.0	200	0.8 - 1.8	7	22A53	
SCF4030-22-10	22	48	62.0 - 92.0	32.0 – 45.0	200	0.8 - 1.8	10	22A83	

1. Rated voltage is the maximum voltage that the fuse can block, not the action voltage of the heater assembly

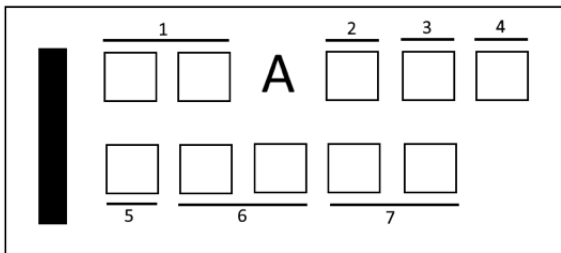
**Dimensions- mm**  
Drawing not to scale



**Recommended pad layout**



**Part marking**



1. Rated current: 12 A, 15 A, 22 A
2. Number related to series cells number
3. Length width size code: J:4.0 x 3.0 mm, for space limit may not shows on the body
4. Extension for (2)
5. Year: D: 2018; E: 2019.....
6. Week of year: 01, 02.....52
7. Running number: 01, 02.....

### General specifications

Operating temperature: -20 °C to +60 °C

Storage temperature: 10 °C to +40 °C < 90% RH

Storage duration: 1 year

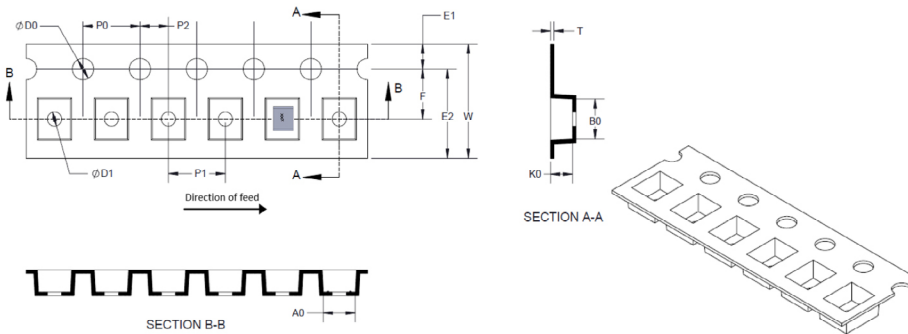
High temperature: +105 °C @ 1000 hours

Humidity: +85 °C @ 85% RH @ 500 hours

Low temperature: -40 °C @ 500 hours

### Packaging information- mm

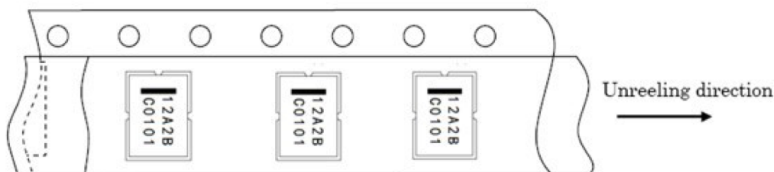
Supplied in tape and reel packaging, 5000 parts per 13" diameter reel. (EIA-481 compliant)



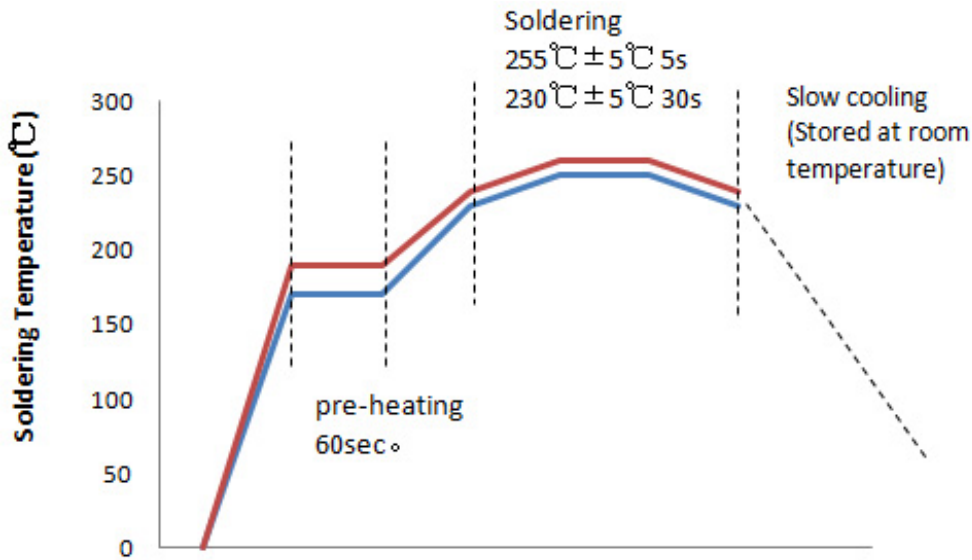
Code	(mm)
E1	1.75 ± 0.10
F	5.50 ± 0.10
P2	2.00 ± 0.05
D0	1.50 + 0.1/-0
D1	1.50 + 0.1/-0
P0	4.00 ± 0.10
10P0	40.0 ± 0.20
W	12.00 ± 0.30
P	8.00 ± 0.10
A0	3.30 ± 0.10
B0	4.30 ± 0.10
K0	1.15 ± 0.10
T	0.30 ± 0.05

### Direction of taping

The direction shall be seen from the top cover tape side



Solder reflow profile



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**Eaton**  
**Electronics Division**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
Eaton.com/electronics

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Printed in USA  
Publication No. ELX1133 BU-ELX21141  
January 2022

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