Technical Data ELX1134

Effective January 2022



# SCF5432

# 5.4 mm x 3.2 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



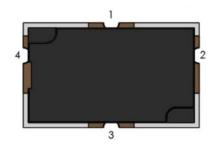
#### **Environmental compliance**

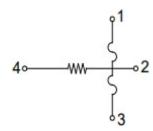


#### Ordering part number



#### 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

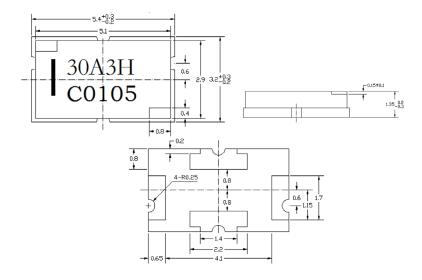
# **Product specifications**

Part number	Current rating (A)	Voltage rating¹ (Vdc)	Heater DCR (Ω)	Operating voltage (V)	Breaking capacity (A)	Fuse DCR (mΩ)	Applicable cells in series	Part Marking	Agency approval cURus
SCF5432-12-01	12	36	1.4 - 2.4	4.0 - 7.0	50	1.5 - 3.5	1	12A1H	√
SCF5432-12-02	12	36	1.8 - 3.2	4.0 - 9.0	50	1.5 - 3.5	2	12A2H	√
SCF5432-12-03	12	36	5.5 - 9.1	7.4 - 13.8	50	1.5 - 3.5	3	12A3H	√
SCF5432-12-04	12	36	11.0 - 18.4	10.5 - 19.6	50	1.0 - 3.5	4	12A4H	√
SCF5432-12-05	12	36	17.0 - 34.0	14.4 - 23.5	50	1.0 - 3.0	5	12A5H	V
SCF5432-12-13	12	62	110 - 200	36.4 - 59.8	50	1.0 - 3.0	13	12A5H2	
SCF5432-12-14	12	62	120 - 220	42 - 62.0	50	1.0 - 3.5	14	12A5H10	
SCF5432-15-03	15	36	5.5 - 8.3	7.4 - 13.8	50	1.0 - 3.0	3	15A3H	√
SCF5432-15-04	15	36	11.0 - 17.0	10.5 - 19.6	50	1.0 - 3.0	4	15A4H	√
SCF5432-15-05	15	36	17.3 - 25.9	14.4 - 23.5	50	1.0 - 3.0	5	15A5H	√
SCF5432-15-06	15	36	22.8 - 46.0	17.3 - 28.20	50	1.0 - 3.0	6	15A5H3	
SCF5432-30-01	30	62	1.0 - 1.5	4.0 - 4.7	80	0.5 - 2.5	1	30A1H	√
SCF5432-30-02	30	62	1.8 - 3.1	6.6 - 9.0	80	0.5 - 2.5	2	30A2H	√
SCF5432-30-03	30	62	4.2 - 7.1	9.9 - 13.5	80	0.5 - 2.5	3	30A3H	√
SCF5432-30-04	30	62	7.7 - 12.9	13.4 - 18.4	80	0.5 - 2.5	4	30A4H	√
SCF5432-30-05	30	62	12.6 - 21.0	17.1 - 23.5	80	0.5 - 2.5	5	30A5H	√
SCF5432-30-06	30	62	17.0 - 27.6	19.8 - 27.0	80	0.5 - 2.5	6	30A7H3	
SCF5432-30-07	30	62	22.6 - 37.7	23.0 - 31.5	80	0.5 - 2.5	6-7	30A7H	√
SCF5432-30-08	30	62	31.0 - 47.0	26.5 - 36.0	80	0.5 - 2.5	7-8	30A7H2	
SCF5432-30-10	30	62	63.75 - 86.25	34.2 - 46.9	80	0.5 - 2.5	9-10	30A10H	√
SCF5432-30-13	30	62	78.0 - 146.7	45.2 - 58.5	80	0.5 - 2.5	13	30A10H4	
SCF5432-30-14	30	62	109.9 - 173.0	45.2 - 62.0	80	0.5 - 2.5	12-14	30A14H	√

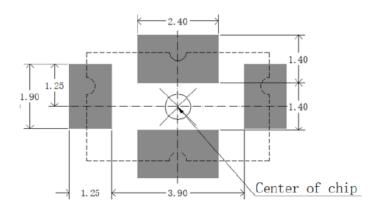
<sup>1.</sup> Rated voltage is the maximum voltage that the fuse can block, not the action voltage of the heater assembly

#### **Dimensions- mm**

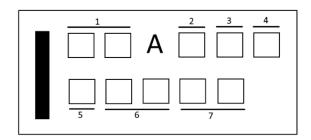
Drawing not to scale



# Recommended pad layout



# Part marking



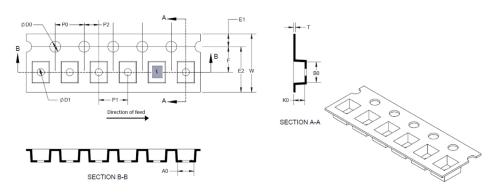
- 1. Rated current: 12A, 15A, 30A
- 2. Number related to series number
- 3. Length width size code: H:  $5.4 \times 3.2$  mm
- 4. Extension for (2)
- 5. Year: D: 2018; E: 2019.....
- 6. Week of year: 01, 02......52
- 7. Running number: 01, 02......

# **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

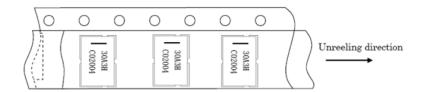
Supplied in tape and reel packaging, 5000 parts per 13" diameter reel. (EIA-481 compliant)



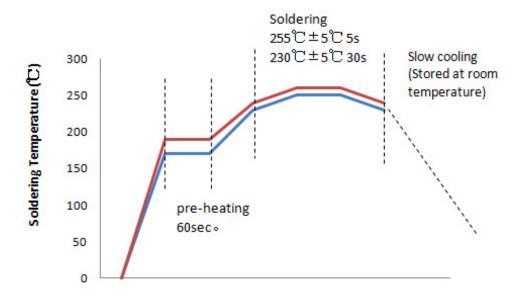
Code	(mm)
E1	1.75 ± 0.10
F	5.50 ± 0.10
P2	2.00 ± 0.1
D0	1.50 + 0.1/-0
D1	1.50 + 0.1/-0
P0	4.00 ± 0.10
10P0	40.0 ± 0.20
W	12.00 ± 0.30
Р	8.00 ± 0.10
A0	3.80 ± 0.10
В0	5.6 ± 0.10
КО	1.5 ± 0.10
T	0.30 ± 0.05

# **Direction of taping**

The direction shall be seen from the top cover tape side



#### Solder reflow profile



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