

# STD

## Strap Type, 15 V / 24 V

### Standard

UL 1434 1<sup>st</sup> Edition  
 CSA C22.2 No. 0 CSA TIL No. CA-3A

### Approvals

cULus Recognition  
 TÜV

### Features

This axial leaded strap product is designed to provide reliable, non-cycling protection for rechargeable batteries. The weldable nickel leads with a narrow, low profile design are ideal to be installed directly onto battery cells.

## Specifications

### Packaging

A small pack  
 D standard

### Materials

Insulating material: Polyester Tape  
 Terminals: Nickel

### Max. Device Surface Temperature in Tripped State

125 °C

### Operating / Storage Temperature

-40 °C to +85 °C (consider derating)

### Humidity Ageing

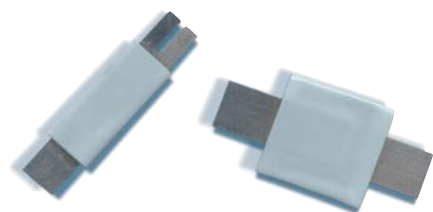
+85 °C, 85 % R.H., 7 days, ± 5 % typical resistance change

### Vibration

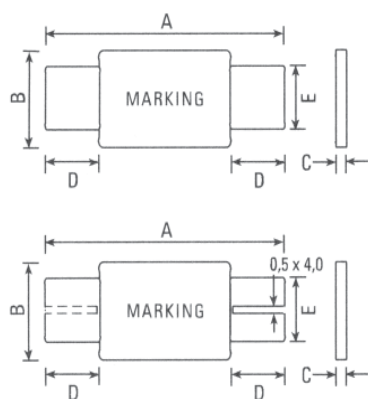
MIL-STD-883C, Condition A, no change

### Marking

"P", Part Code, identification, lot number



Dimensions (mm)



S: one slot



| Dimensions (mm) |     |      |      |      |      |     |     |     |     |     |     |                    |          |
|-----------------|-----|------|------|------|------|-----|-----|-----|-----|-----|-----|--------------------|----------|
| Model           | Fig | A    |      | B    |      | C   |     | D   |     | E   |     | packaging quantity |          |
|                 |     | Min  | Max  | Min  | Max  | Min | Max | Min | Max | Min | Max | small pack         | standard |
| STD120          | 1   | 19.9 | 22.1 | 4.9  | 5.2  | 0.6 | 1.0 | 5.5 | 3.9 | 4.1 |     | 500                | 10,000   |
| STD120S         | 2   | 19.9 | 22.1 | 4.9  | 5.2  | 0.6 | 1.0 | 5.5 | 3.9 | 4.1 |     | 500                | 10,000   |
| STD175          | 1   | 20.9 | 23.1 | 4.9  | 5.2  | 0.6 | 1.0 | 4.1 | 3.9 | 4.1 |     | 500                | 10,000   |
| STD175S         | 2   | 20.9 | 23.1 | 4.9  | 5.2  | 0.6 | 1.0 | 4.1 | 3.8 | 4.2 |     | 500                | 10,000   |
| STD200          | 1   | 23.3 | 23.4 | 10.2 | 11.0 | 0.5 | 1.1 | 5.0 | 4.8 | 5.4 |     | 500                | 10,000   |
| STD350          | 1   | 28.4 | 31.8 | 13.0 | 13.5 | 0.5 | 1.1 | 6.3 | 6.0 | 6.6 |     | 500                | 5,000    |
| STD420          | 1   | 30.6 | 32.4 | 12.9 | 13.6 | 0.5 | 1.1 | 5.0 | 5.0 | 6.7 |     | 500                | 5,000    |

| Permissible continuous operating current is ≤ 100 % at ambient temperature of 20 °C (68 °F). |                       |                       |                          |                       |                           |                         |                       |                       |                         |              |   |  |
|--|-----------------------|-----------------------|--------------------------|-----------------------|---------------------------|-------------------------|-----------------------|-----------------------|-------------------------|--------------|---|--|
| Model  | I <sub>hold</sub> (A) | I <sub>Trip</sub> (A) | V <sub>max. dc</sub> (V) | I <sub>max.</sub> (A) | max. time to trip (s @ A) | P <sub>d max.</sub> (W) | Resistance            |                       |                         | Approvals    |   |  |
|  |                       |                       |                          |                       |                           |                         | R <sub>min.</sub> (Ω) | R <sub>max.</sub> (Ω) | R <sub>I max.</sub> (Ω) | cULus<br>TÜV |   |  |
| STD120   | 1.20A                 | 2.7                   | 15V                      | 100                   | 5.00 @ 6.00               | 1.20                    | 0.085                 | 0.160                 | 0.220                   | •            | • |  |
| STD120S  | 1.20A                 | 2.7                   | 15V                      | 100                   | 5.00 @ 6.00               | 1.20                    | 0.085                 | 0.160                 | 0.220                   | •            | • |  |
| STD175   | 1.75A                 | 3.8                   | 15V                      | 100                   | 5.00 @ 8.75               | 1.50                    | 0.050                 | 0.090                 | 0.120                   | •            | • |  |
| STD175S  | 1.75A                 | 3.8                   | 15V                      | 100                   | 5.00 @ 8.75               | 1.50                    | 0.050                 | 0.090                 | 0.120                   | •            | • |  |
| STD200   | 2.00A                 | 4.4                   | 24V                      | 100                   | 4.00 @ 10.00              | 1.90                    | 0.030                 | 0.060                 | 0.100                   | •            | • |  |
| STD350   | 3.50A                 | 6.3                   | 24V                      | 100                   | 3.00 @ 20.00              | 2.50                    | 0.017                 | 0.031                 | 0.050                   | •            | • |  |
| STD420   | 4.20A                 | 7.6                   | 24V                      | 100                   | 6.00 @ 20.00              | 2.90                    | 0.012                 | 0.024                 | 0.040                   | •            | • |  |

NOTE:

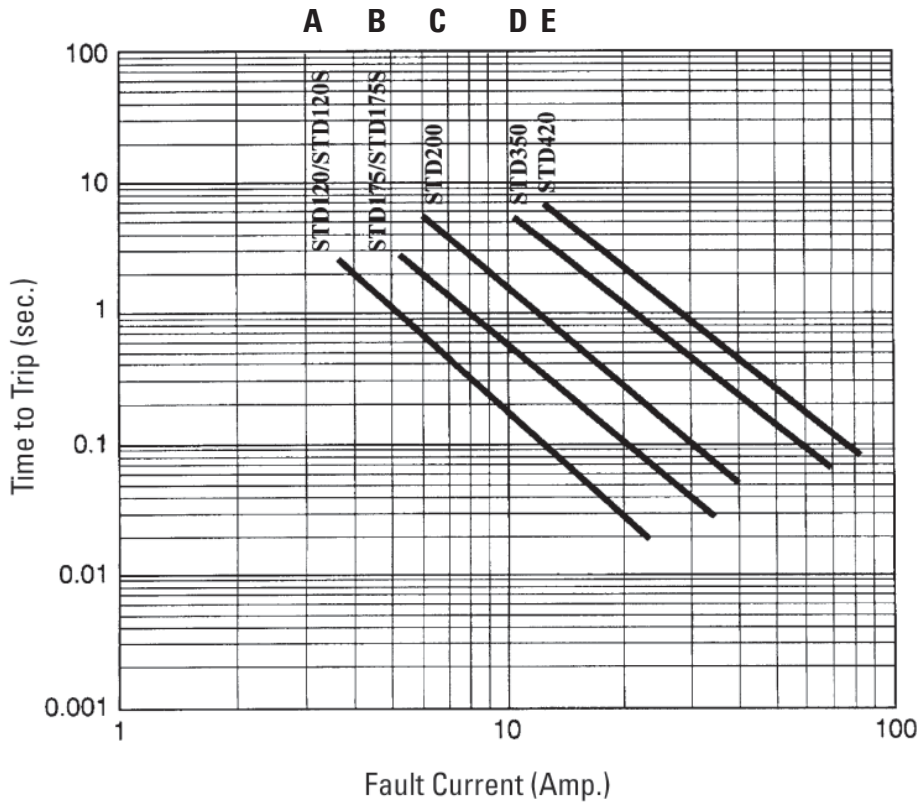
I<sub>hold</sub> = Hold current: maximum current device will pass without tripping in 20 °C still air.  
 I<sub>Trip</sub> = Trip current: minimum current at which the device will trip in 20 °C still air.  
 V<sub>max.</sub> = Maximum voltage device can withstand without damage at rated current (I<sub>max.</sub>)  
 I<sub>max.</sub> = Maximum fault current device can withstand without damage at rated voltage (V<sub>max.</sub>)

P<sub>d</sub> = Power dissipated from device when in the tripped state at 20 °C still air.  
 R<sub>min.</sub> = Minimum resistance of device in initial (un-soldered) state.  
 R<sub>I max.</sub> = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.  
**Caution: Operation beyond the specified rating may result in damage and possible arcing and flame. Specifications are subject to change without notice**

Order Information

| Qty. | Order-Number | Model | Packaging |
|------|--------------|-------|-----------|
|      |              |       |           |

## STD



- A: STD120
- B: STD175
- C: STD200
- D: STD350
- E: STD420

Further Time-Current-Curves on request

## Thermal Derating Chart

| Model   | Ambient Operation Temperature - $I_{hold}$ (A) |        |      |       |       |       |       |       |       |
|---------|--|--------|------|-------|-------|-------|-------|-------|-------|
|         | -40 °C   | -20 °C | 0 °C | 23 °C | 40 °C | 50 °C | 60 °C | 70 °C | 85 °C |
| STD120  | 1.90   | 1.70   | 1.50 | 1.20  | 1.00  | 0.90  | 0.80  | 0.70  | 0.50  |
| STD120S | 1.90   | 1.70   | 1.50 | 1.20  | 1.00  | 0.90  | 0.80  | 0.70  | 0.50  |
| STD175  | 2.50   | 2.30   | 2.00 | 1.75  | 1.50  | 1.30  | 1.20  | 1.10  | 0.90  |
| STD175S | 2.50   | 2.30   | 2.00 | 1.75  | 1.50  | 1.30  | 1.20  | 1.10  | 0.90  |
| STD200  | 3.20   | 2.80   | 2.50 | 2.00  | 1.70  | 1.60  | 1.40  | 1.20  | 0.90  |
| STD350  | 5.40   | 4.80   | 4.30 | 3.50  | 3.00  | 2.80  | 2.50  | 2.20  | 1.70  |
| STD420  | 6.40   | 5.70   | 5.10 | 4.20  | 3.60  | 3.30  | 3.00  | 2.60  | 2.10  |