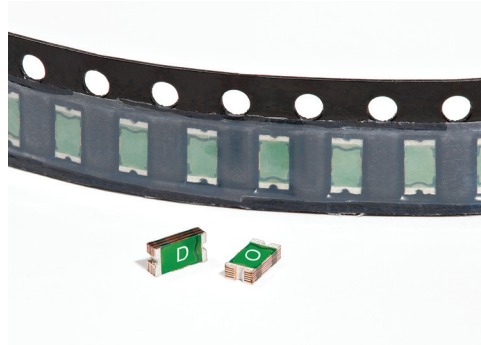


# PTS0805

## 6-24 Volt DC surface mount resettable PTC devices



### Product features

- Positive temperature coefficient (PTC)
- SMT resettable device
- Low resistance
- 6 to 24 volts
- Current ratings from 0.1 A to 0.75 A
- Fast time-to-trip
- Small EIA size 0805 (2012 metric) footprint

### Applications

- USB Peripherals
- Disk drives
- Power tools
- Rechargeable battery pack protection
- Plug and play protection for motherboards and peripherals
- Mobile phones - battery and port protection
- Game console port protection
- Digital cameras
- Set-top boxes
- Tablets/notebooks/netbooks

### Agency information

- cURus Recognized card, File No: E343021
- TÜV, File: R 50283843

### Part number system/ordering:

**PT S 0805 6V 035**

- PT = PolyTron™ PTC device series
- S = Surface mount
- 0805 = Dimension code
- 6V = Maximum voltage
- 035 = Current hold ( $I_{hold}$ )

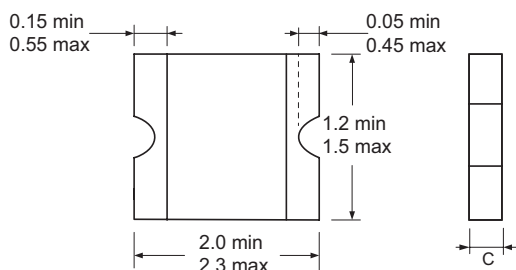
**Product specifications- (+23 °C)**

Catalog number	Part marking	V <sub>max</sub> (Vdc)	I <sub>max</sub> (A)	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	P <sub>d</sub> max. (W)	Time to trip (max.)		Resistance (Ω)		Agency information	
									Initial (R <sub>i</sub> )	Post trip (R <sub>t</sub> )		
							(A)	(sec)	min.	max.	cURus	TUV
PTS080524V010	D	24	100	0.1	0.30	0.6	0.5	1.5	1.0	6.0	X	X
PTS08059V020	L	9	100	0.2	0.50	0.5	8.0	0.05	0.65	3.5	X	X
PTS08056V035	T	6	100	0.35	0.75	0.5	8.0	0.1	0.25	1.2	X	X
PTS08056V050	O	6	100	0.5	1.00	0.5	8.0	0.2	0.15	0.85	X	X
PTS08056V075	X	6	100	0.75	1.50	0.5	8.0	0.3	0.09	0.40	X	X

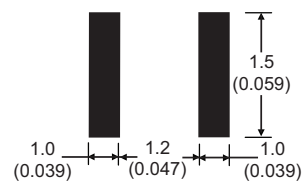
Notes:  
 I<sub>hold</sub> – Hold current: Maximum current device will pass without interruption in +23 °C still air.  
 I<sub>trip</sub> – Trip current: Minimum current that will switch the device from low resistance to high resistance in +23 °C still air.  
 V<sub>max</sub>: Maximum continuous voltage device can withstand without damage at rated current.  
 I<sub>max</sub>: Maximum fault current device can withstand without damage at rated voltage.  
 P<sub>d</sub>: Power dissipated from device when in the tripped state in +23 °C still air.  
 R<sub>i</sub> (min.): Minimum resistance of device as supplied at +23 °C unless otherwise specified.  
 R<sub>t</sub> (max.): Maximum resistance of device when measured one hour post reflow (SMD) or one hour post trip (radial-leaded device) at +23°C unless otherwise specified.

**Dimensions - mm**

Part number	C max.
PTS080524V010	1.00
PTS08059V020	1.00
PTS08056V035	0.75
PTS08056V050	1.25
PTS08056V075	1.25



**Recommended land pattern - mm (in)**



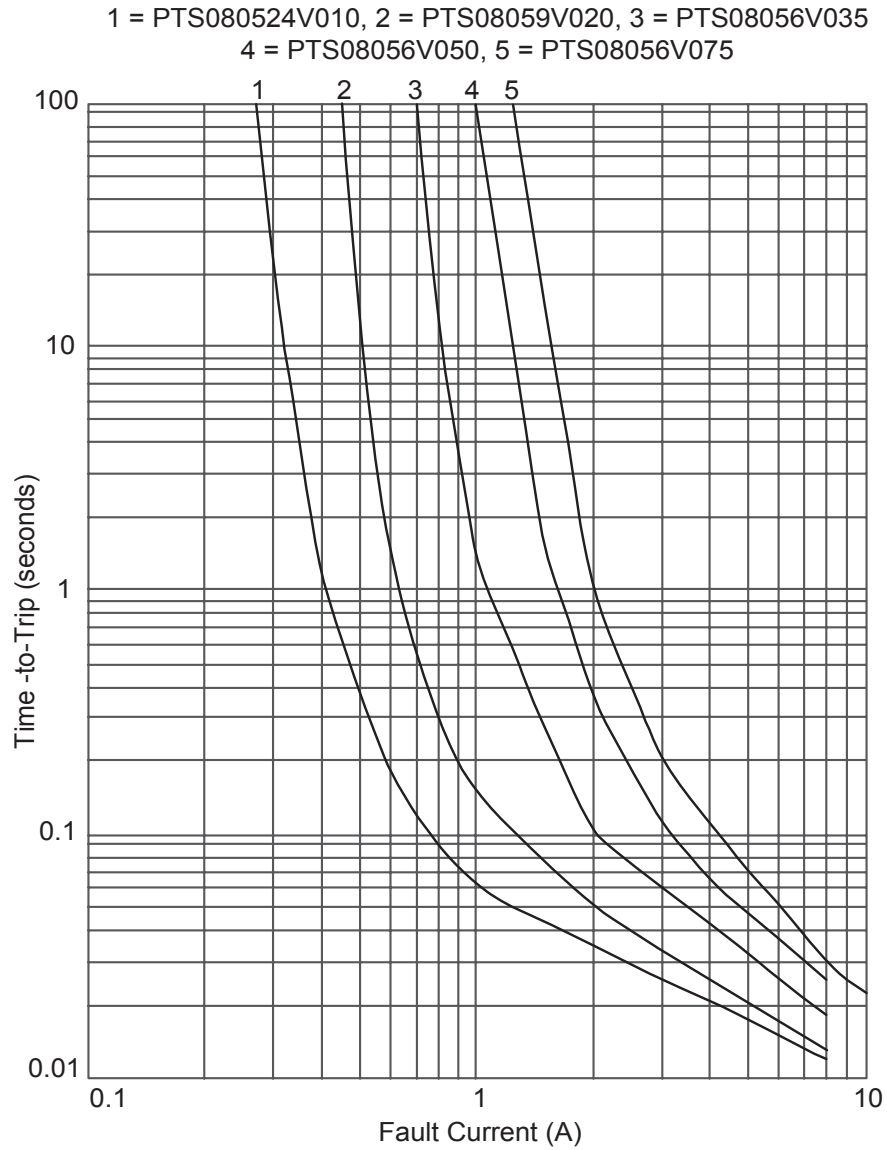
**Environmental specifications**

Characteristic	Value
Operating temperature range	-40 °C to +85 °C
Surface temperature in tripped state	+125 °C max.
Thermal shock	+85 °C to -40 °C, 20 cycles, -33% typical resistance change
Solvent resistance	MIL-STD-202 Method 215, no change
Humidity age test	Specified temperature (+23 °C ± 3 °C)+85 °C, 85% RH, 100 hours ±5% typical resistance change.
Storage temperature range	-10 °C to +40 °C
Storage duration	One year
Storage relative humidity	≤75%
Storage conditions	Keep away from corrosive atmosphere and sunlight

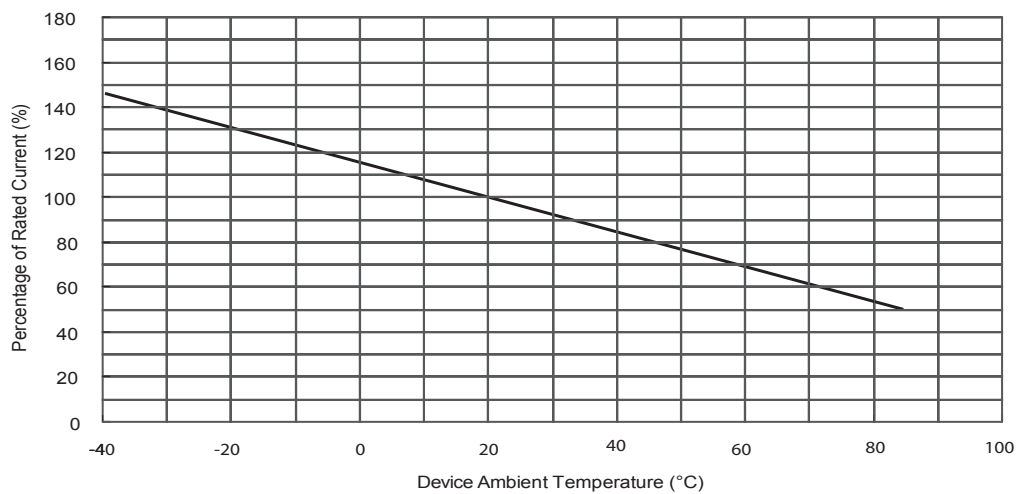
**Terminal material:**

- Nickel/tin-plated copper

**Time to trip curves at +23°C**

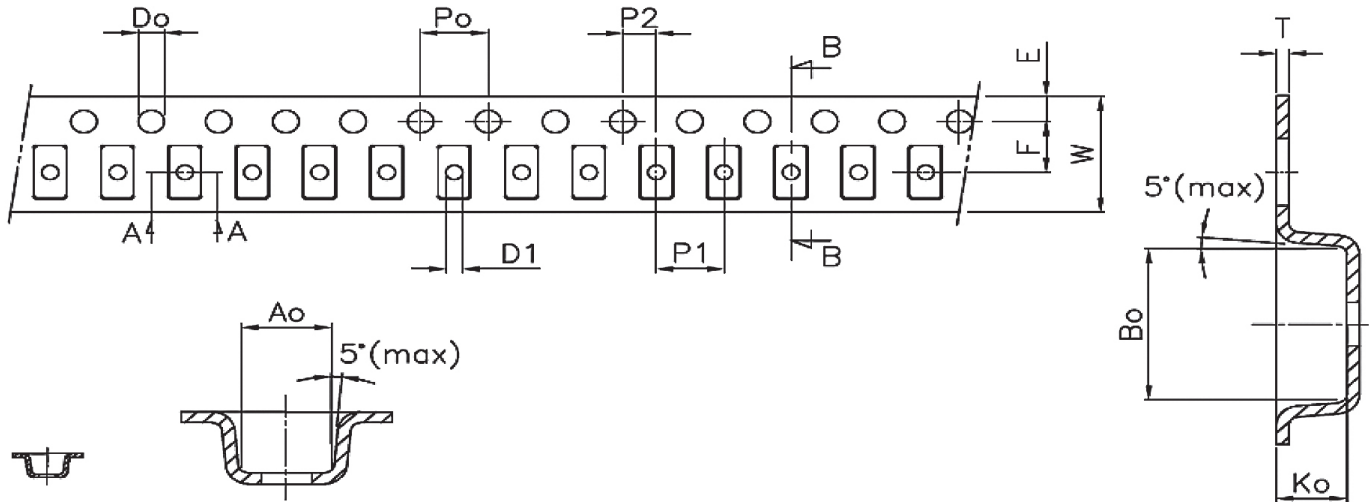


**Temperature derating curve**



**Packaging information - mm**

4000 devices per 178 mm diameter reel



A0	B0	K0	P0	P1	P2	T	E	F	D0	D1	W	10P0
±0.10	±0.10	±0.10	±0.10	±0.10	±0.05	±0.05	±0.10	±0.05	±0.10	Min.	±0.10	±0.20
1.6	2.3	0.9	4.0	4.0	2.0	0.25	1.75	3.5	1.5	1.0	8.1	40.0

**Reel specifications**

4000 devices per 178 mm diameter reel

