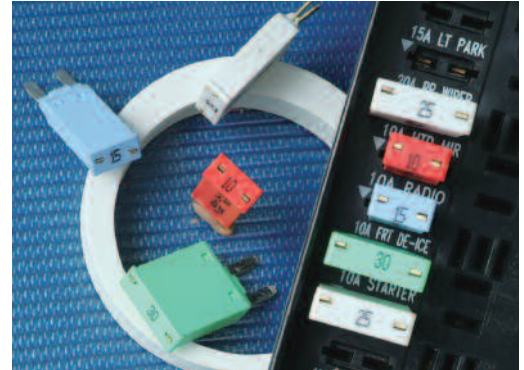


PolySwitch BD280 Bladed Contact Resettable Overcurrent Protection



Feature:

2.8mm terminals

Latches on first trip

PTC resistance switching action

Constant wattage power dissipation when tripped

Solid state construction

Probe points

Bright color coded housing

Low thermal derating

Function:

Directly replaces mini-sized automotive fuses and circuit breakers

No cycling into short or overload

No contacts to erode or weld together

Virtually constant power consumption across voltage range 4V to 16V

Very high resistance to shock and vibration

Easier diagnostics

Easily recognizable current rating

Passes more current at higher temperatures than bi-metal circuit breakers

Benefit:

Easy to implement, reliable solid state resettable overcurrent protection

Reduces fault energy delivered to the wiring and loads

Long, safe performance life

Resilient at minimum and maximum voltage

Not subject to change in calibration due to rough handling or high shock and vibration

Facilitates fault finding

Less chance of mis-installation
Color recognition inspection possible

Offers resettable overcurrent protection even in vehicle underhood applications

Applications:

- Automotive and Heavy Trucks Circuits
- Wiring Harness Protection
- 12V Power Outlets
- Intermittent Duty Circuits (with high inrush current)

• DC Motor Circuits

Power Window, Power Seat, Power Door Lock,
Fuel & Trunk Door Release, Others
(needing to survive lock rotor conditions)

Electrical Characteristics:

Nominal Operating Voltage:	14V
Maximum Operating Voltage:	16V
Current Ratings:	10A, 15A, 20A, 25A, 30A
Cycle Life:	1,000 cycles @ 100A fault current
Trip Endurance:	1,000 hours @ 14V
Load Dump:	Per ISO 7337-1

Interrupt Current and Voltage Drop Meets or exceeds SAE J553:

Current Ratings (A)	I Interrupt* (A)	Max. Voltage Drop (mV) @ Current Rating
10	225	180
15	300	160
20	450	135
25	450	115
30	450	105

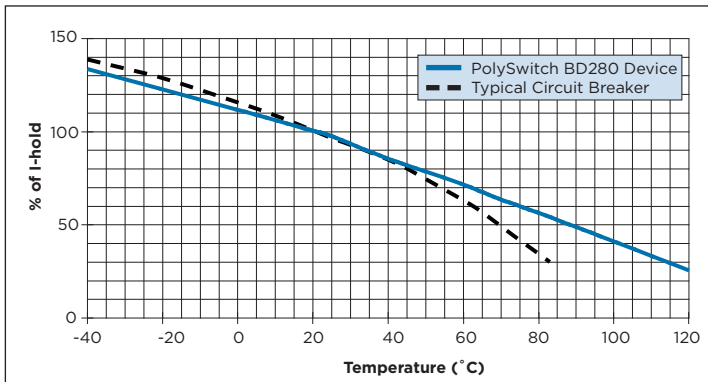
* Tested to 5 cycles

Environmental Specifications:

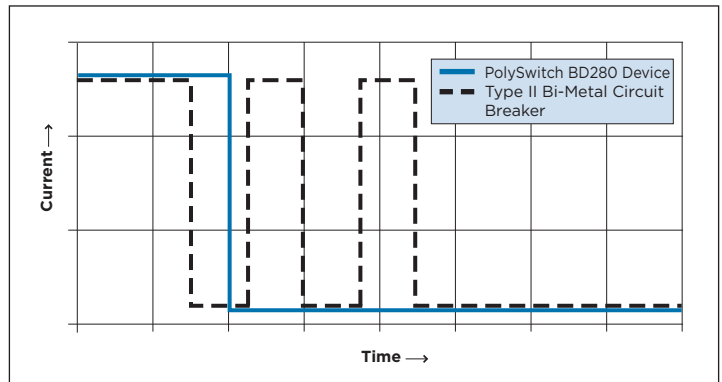
Operating Temperature:	-40°C to +125°C
Vibration:	Meets or exceeds SAE J553
Mechanical Shock:	Meets or exceeds SAE J553
Thermal Shock:	Meets or exceeds SAE J553
Humidity:	Meets or exceeds SAE J553
Cap Retention:	90N (20lbf)

Materials:

Box Material:	PBT meeting UL V-0 requirements
Terminal Material:	Brass with Tin over Nickel plating



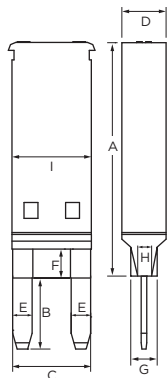
PolySwitch bladed devices exhibit much less roll-off at high temperatures which allows for their use in underhood applications.



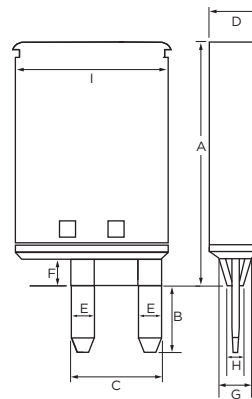
PolySwitch BD280 device latches after the first overcurrent trip, whereas Type II bi-metal circuit breakers typically cycle several times.

Part Numbers, Styles and Dimensions

Part Number	Current Ratings	Body Style	mm Min/Max (inch approx.)									
			A	B	C	D	E(x2)	F	G	H	I	
BD280-1130-10/16	10A	1	29.5/30.1 (1.173/1.185)	8.7/9.3 (0.343/0.366)	10.75/11.25 (0.423/0.443)	6.05/6.65 (0.238/0.262)	2.55/3.05 (0.1/0.12)	3.3/3.9 (0.13/0.154)	3.4/4 (0.134/0.157)	1.7/2.3 (0.067/0.091)	10.9/11.5 (0.429/0.453)	
BD280-1130-15/16	15A	1	29.5/30.5 (1.173/1.185)	8.7/9.3 (0.343/0.366)	10.75/11.25 (0.423/0.443)	6.05/6.65 (0.238/0.262)	2.55/3.05 (0.1/0.12)	3.3/3.9 (0.13/0.154)	3.4/4 (0.134/0.157)	1.7/2.3 (0.067/0.091)	10.9/11.5 (0.429/0.453)	
BD280-1130-20/16	20A	1	29.5/30.1 (1.173/1.185)	8.7/9.3 (0.343/0.366)	10.75/11.25 (0.423/0.443)	6.05/6.65 (0.238/0.262)	2.55/3.05 (0.1/0.12)	3.3/3.9 (0.13/0.154)	3.4/4 (0.134/0.157)	1.7/2.3 (0.067/0.091)	10.9/11.5 (0.429/0.453)	
BD280-1927-25/16-W	25A	2	26.65/27.35 (1.049/1.077)	8.6/9.2 (0.339/0.362)	10.75/11.25 (0.423/0.443)	6.05/6.65 (0.238/0.262)	2.55/3.05 (0.1/0.12)	1.8/2.2 (0.071/0.087)	3.5/3.9 (0.138/0.154)	1.7/2.3 (0.067/0.091)	19/19.4 (0.748/0.764)	
BD280-1927-30/16-W	30A	2	26.65/27.35 (1.049/1.077)	8.6/9.2 (0.339/0.362)	10.75/11.25 (0.423/0.443)	6.05/6.65 (0.238/0.262)	2.55/3.05 (0.1/0.12)	1.8/2.2 (0.071/0.087)	3.5/3.9 (0.138/0.154)	1.7/2.3 (0.067/0.091)	19/19.4 (0.748/0.764)	



Body Style 1



Body Style 2

Raychem Circuit Protection Products

308 Constitution Drive, Building H Tel : (800) 227-7040, (650) 361-6900
Menlo Park, CA USA 94025-1164 Fax : (650) 361-4600

www.circuitprotection.com
www.circuitprotection.com.hk (Chinese)
www.tycoelectronics.com/japan/raychem (Japanese)

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