



## Photovoltaic Solar Cell Protection Schottky Diode

**Reverse Voltage - 80 to 100Volts**  
**Forward Current - 25.0 Amperes**

### Features

- Low power loss, high efficiency
- High current capability, low  $V_F$
- High surge capacity

### Mechanical Data

- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

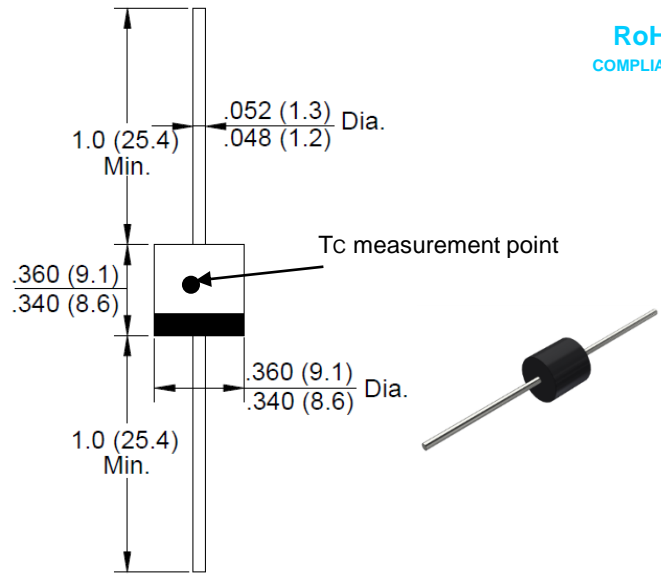
### Applications

- For use in solar cell junction box as a bypass diode

R-6



RoHS  
COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	25PV080	25PV100	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	80	100	V
Maximum RMS Voltage	VRMS	56	70	V
Maximum DC Blocking Voltage	VDC	80	100	V
Maximum Average Forward Rectified Current @ $T_L=95^\circ\text{C}$	I(AV)	25		A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	400		A
Peak Forward Voltage at 25A DC (Note1)	VF	0.8		V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$	IR	0.5		mA
at Rated DC Blocking Voltage @ $T_J=100^\circ\text{C}$		50		
Typical Thermal Resistance Junction to Lead (Note 2)	RθJL	1.8		°C/W
Junction Temperature Range	TJ	-55 to +200		°C
Storage Temperature Range	TSTG	-55 to +200		°C

Notes: 1. 300uS pulse width, 2% duty cycle.

2. Thermal Resistance Junction to lead / terminal at a distance 1mm from case.

3. The typical data above is for reference only .



Fig. 1 - Forward Current Derating Curve

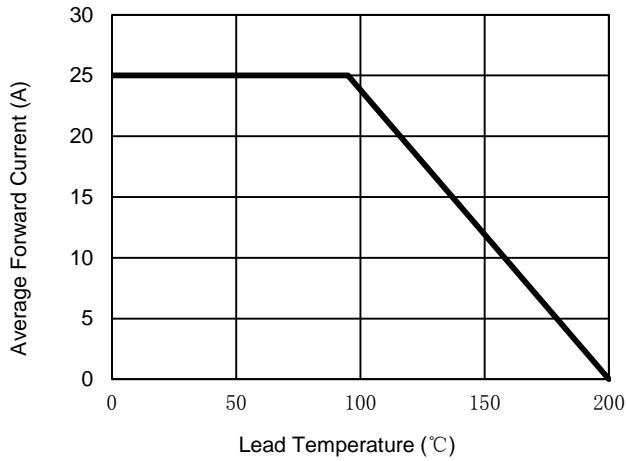


Fig. 2 - Maximum Non-Repetitive Surge Current

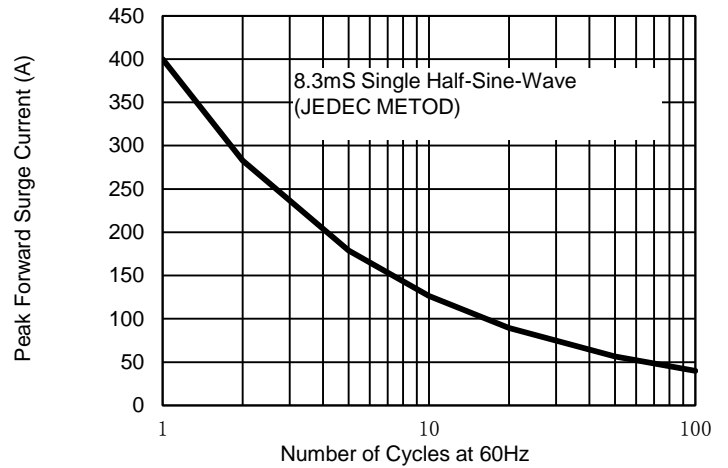


Fig. 3 - Typical Reverse Characteristics

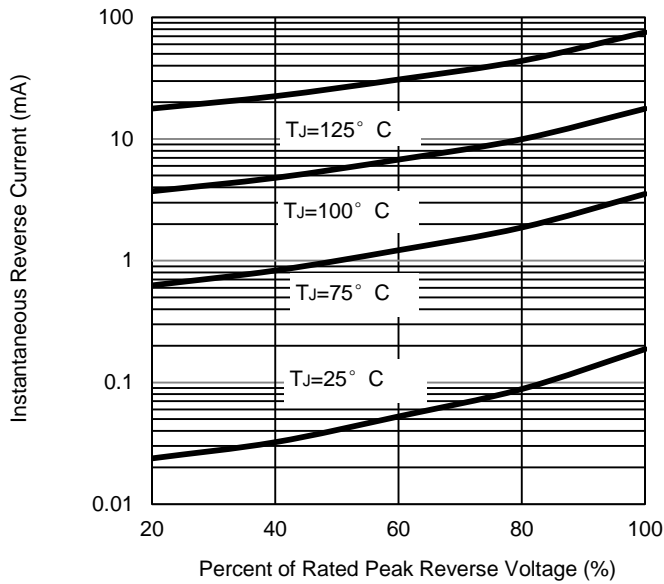
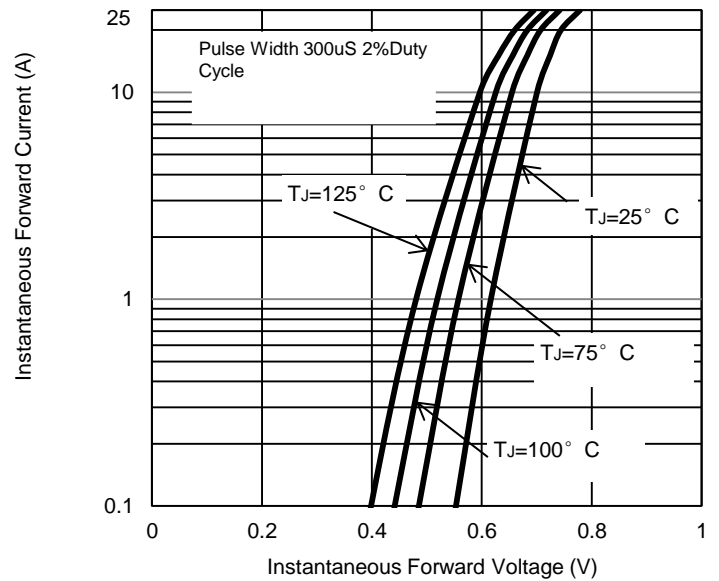


Fig. 4 - Typical Forward Characteristics





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