



# DATA SHEET

## PS200~PS2010

### PLASTIC SILICON RECTIFIER

**VOLTAGE** 50 to 1000 Volts **CURRENT** 2.0 Amperes

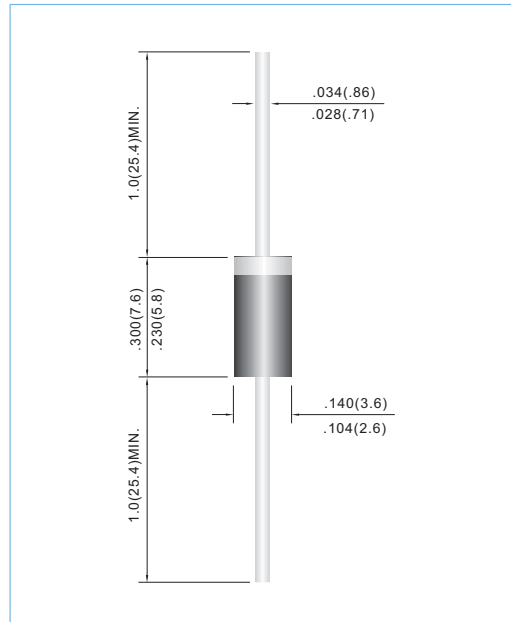
**DO-15** Unit: inch(mm)

#### FEATURES

- Low cost
- High current capability
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: Molded plastic, DO-15  
 Terminals: Axial leads, solderable to MIL-STD-202G, Method 208  
 Polarity: Color Band denotes cathode end  
 Mounting Position: Any  
 Weight: 0.015 ounce, 0.4 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

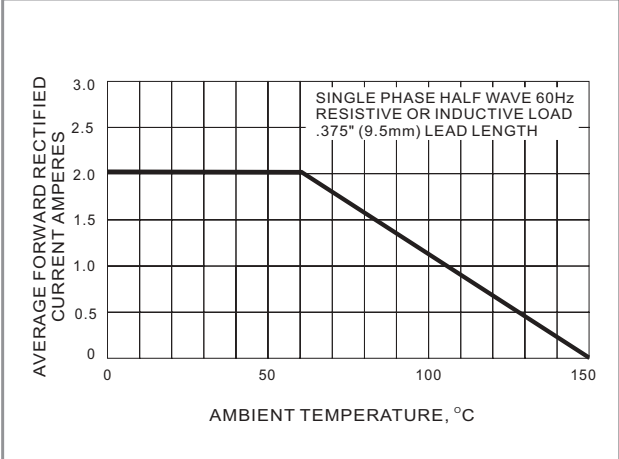
Ratings at 25°C ambient temperature unless otherwise specified.  
 Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	PS200	PS201	PS202	PS204	PS206	PS208	PS2010	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375" (9.5mm) lead length at TA = 60°C	I <sub>AV</sub>	2.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	70							A
Maximum Forward Voltage at 2.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at TA = 25°C Rated DC Blocking Voltage TA = 100°C	I <sub>R</sub>	5.0 500							uA
Typical Junction capacitance (Note 1)	C <sub>J</sub>	25							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub> R <sub>θJL</sub>	45 25							°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 TO +150							°C

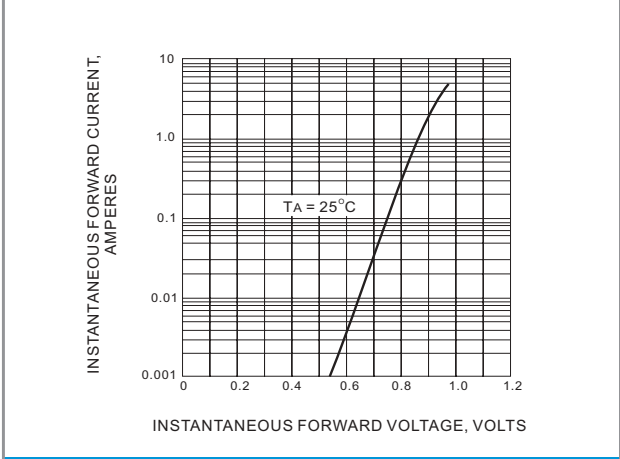
NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC  
 2. Thermal resistance from junction to ambient and from junction to lead length 0.375" (9.5mm) P.C.B. mounted



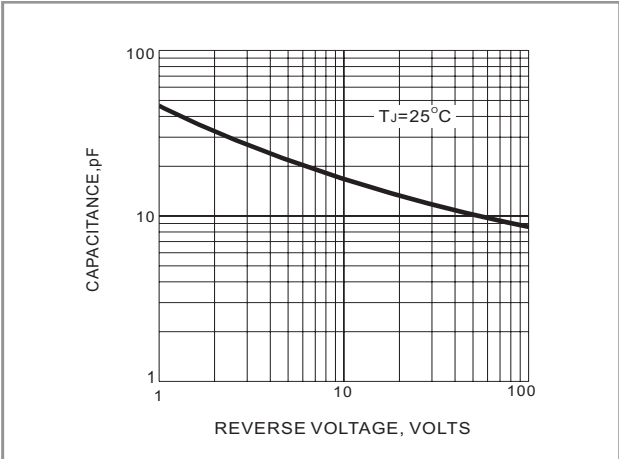
**RATING AND CHARACTERISTIC CURVES**



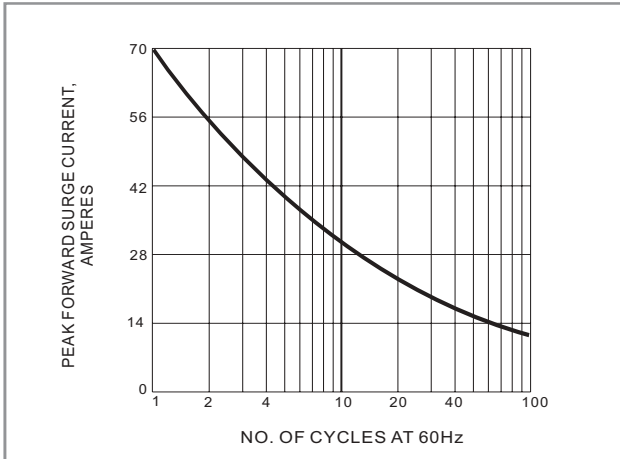
**FIG.1 FORWARD CURRENT DERATING CURVE**



**FIG.2 TYPICAL FORWARD CHARACTERISTICS**



**FIG.3 TYPICAL JUNCTION CAPACITANCE**



**FIG.4 MAX NON-REPETITIVE SURGE CURRENT**