



# DATA SHEET

## PS200~PS2010

### PLASTIC SILICON RECTIFIER

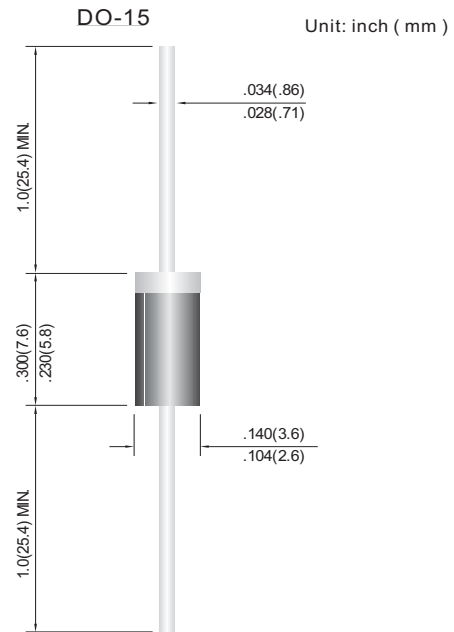
**VOLTAGE 50 to 1000 Volts CURRENT - 2.0 Amperes**

#### FEATURES

- Low cost
- High current capability
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- 2.0 ampere operation at TA = 55°C with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage

#### MECHANICAL DATA

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



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

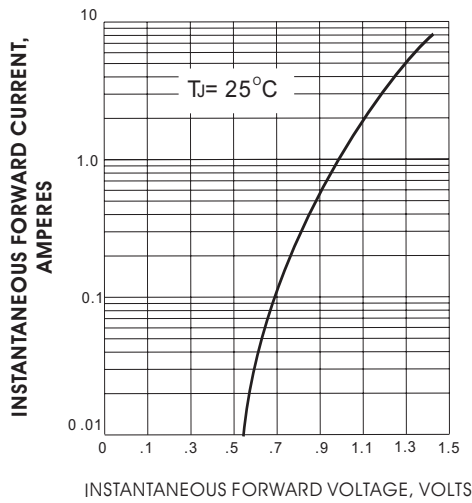
Ratings at 25°C ambient temperature unless otherwise specified.  
 Resistive or inductive load, 60Hz.

	PS200	PS201	PS202	PS204	PS206	PS208	PS2010	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=60°C	2.0							A
Peak Forward Surge Current, IFM (surge):8.3ms single half sine-wave superimposed on rated load(JEDEC method)	70.0							A
Maximum Forward Voltage at 2.0A DC	1.10							V
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=25°C	5.0							µA
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=100°C	500							µA
Typical Junction capacitance (Note 1)	25.0							pF
Typical Junction Resistance(Note 2) RθJA	25.0							°C/ W
Operating and Storage Temperature Range TJ, TSTG	-55 to +150							°C

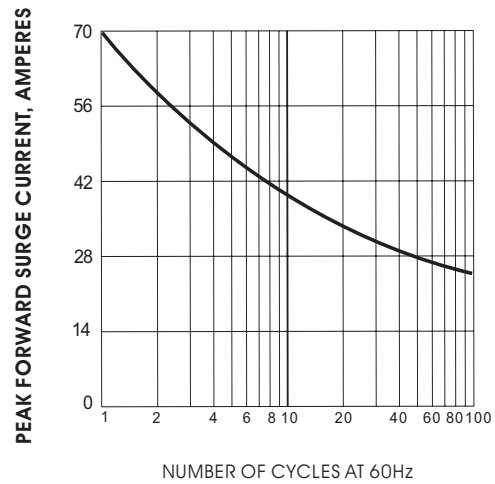
NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC  
 2. Thermal resistance from junction to ambient and from junction to lead 0.375"(9.5mm) P.C.B. mounted



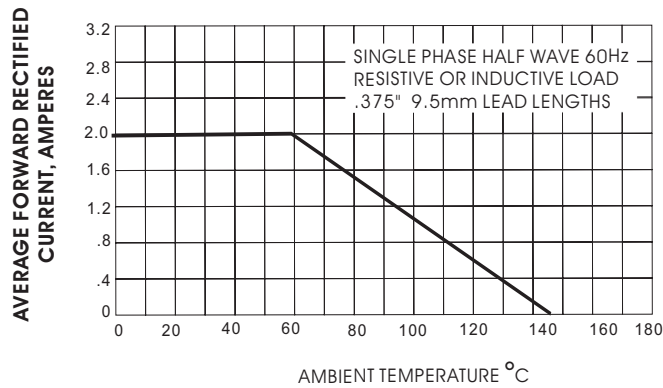
## RATING AND CHARACTERISTIC CURVES



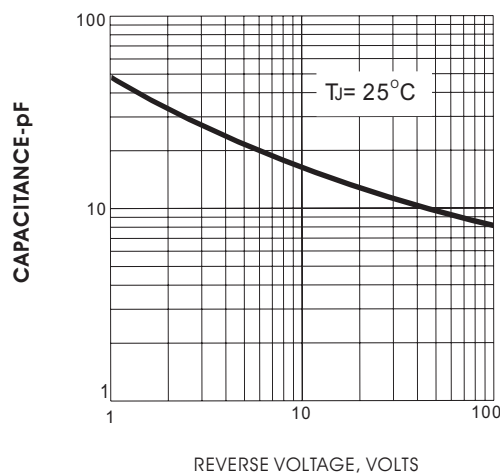
**Fig.2- TYPICAL FORWARD CHARACTERISTICS**



**Fig.2- PEAK FORWARD SURGE CURRENT**



**Fig.3- FORWARD CURRENT DERATING CURVE**



**Fig.4- TYPICAL JUNCTION CAPACITANCE**