PS200~PS2010

PLASTIC SILICON RECTIFIER

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

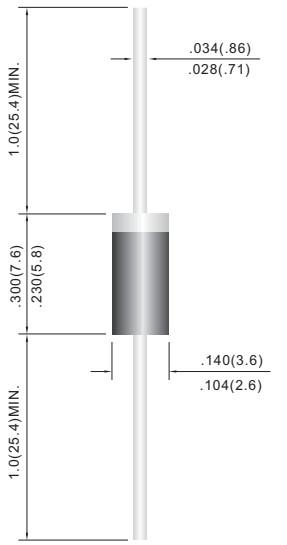
FEATURES

- Low cost
- High current capability
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable to MIL-STD-750,Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.397 gram

DO-15 Unit: inch(mm)



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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at T_A = 60°C	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	70							A
Maximum Forward Voltage at 2.0A	V_F	1.1							V
Maximum DC Reverse Current at T_J = 25°C Rated DC Blocking Voltage T_J = 100°C	I_R	5.0 500							μA
Typical Junction capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$	70 50							°C / W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	25							°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-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

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RATING AND CHARACTERISTIC CURVES

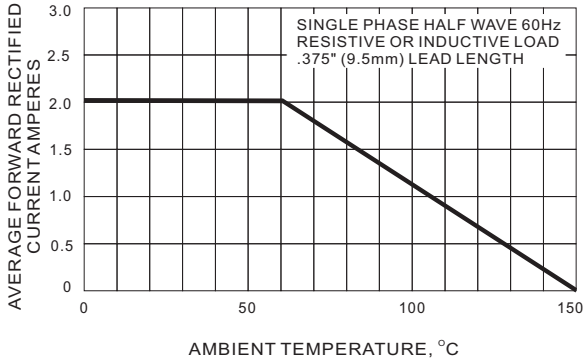


FIG.1 FORWARD CURRENT DERATING CURVE

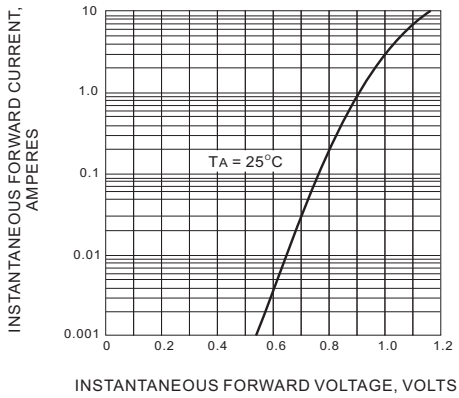


FIG.2 TYPICAL FORWARD CHARACTERISTICS

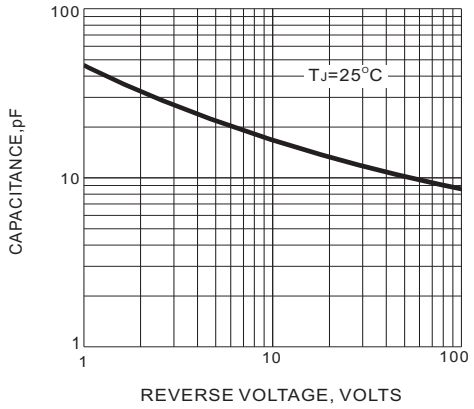


FIG.3 TYPICAL JUNCTION CAPACITANCE

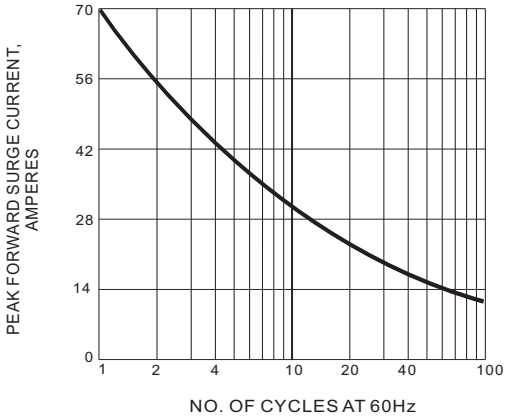


FIG.4 MAX NON-REPETITIVE SURGE CURRENT

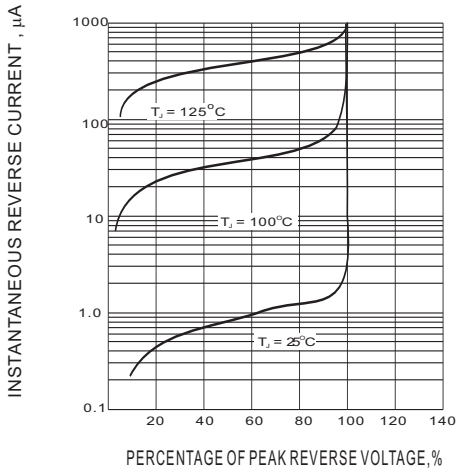


Fig.5-TYPICAL REVERSE CHARACTERISTIC