



PS150~PS1510

PLASTIC SILICON RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 1.5 Amperes

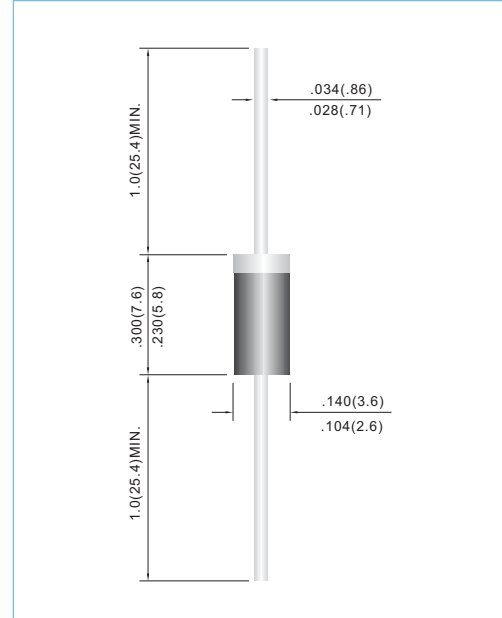
DO-15 Unit: inch(mm)

FEATURES

- 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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz, Single phase, half wave, For capacitive load, derate current by 20%

PARAMETER	SYMBOL	PS150	PS151	PS152	PS154	PS156	PS158	PS1510	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 $T_A=60^\circ\text{C}$	$I_{F(AV)}$	1.5							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	50							A
Maximum Forward Voltage at 1.5A	V_F	1.1							V
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	I_R	5.0 500							μA
Typical Junction capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	45 28							$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

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



PS150~PS1510

RATING AND CHARACTERISTIC CURVES

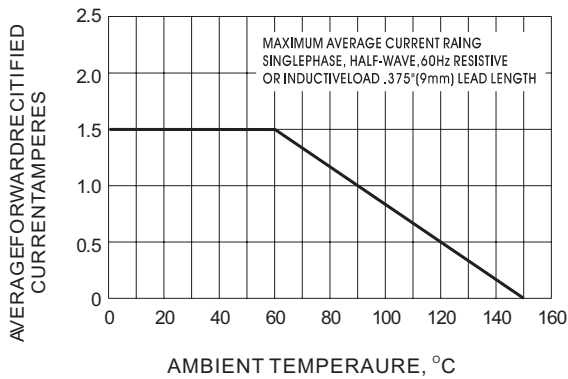


Fig.1- FORWARD CURRENT DERATING CURVE

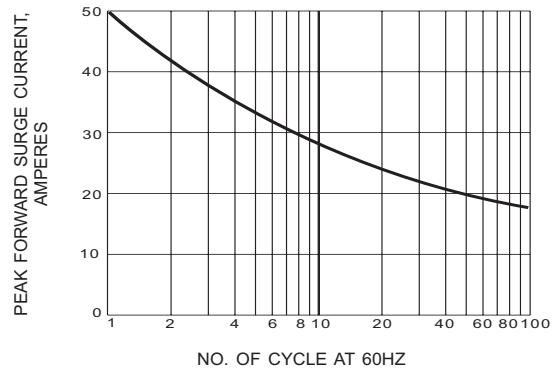


Fig.2- MAXIMUM OVERLOAD SURGE CURRENT

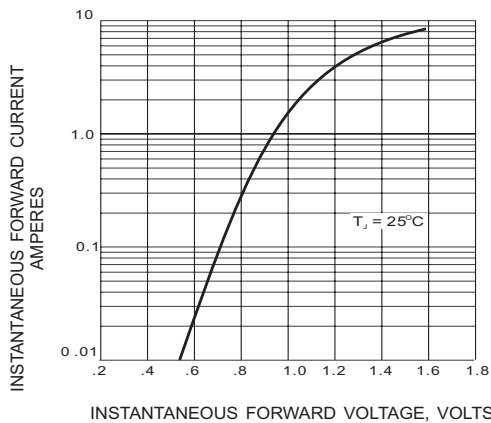


Fig.3- TYPICAL FORWARD CHARACTERISTIC

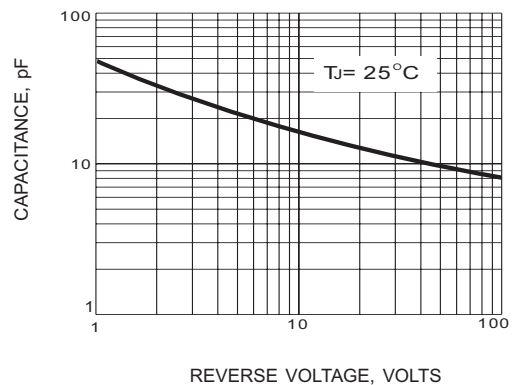


Fig.4- TYPICAL JUNCTION CAPACITANCE

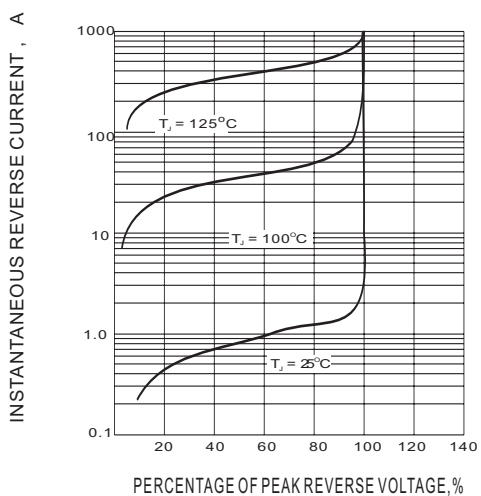


Fig.5- TYPICAL REVERSE CHARACTERISTIC