PANJIT SEMI CONDUCTOR

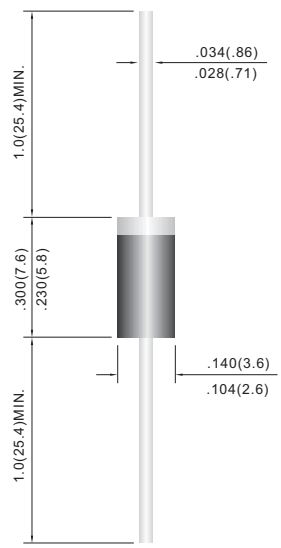
DATA SHEET

PS150R~PS1510R

FAST SWITCHING PLASTIC RECTIFIER

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

DO-15 Unit: inch(mm)



FEATURES

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

MECHANICALDATA

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	PS150R	PS151R	PS152R	PS154R	PS156R	PS158R	PS1510R	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 TA=55°C	I_{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	1.3							V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I_R	5.0 500							uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	150				250	500		ns
Typical Junction capacitance (Note 2)	C_J	25							pF
Typical Thermal Resistance (Note 3)	$R\theta JA$	40							°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 TO +150							°C

NOTES:1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{rr}=.25A

2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

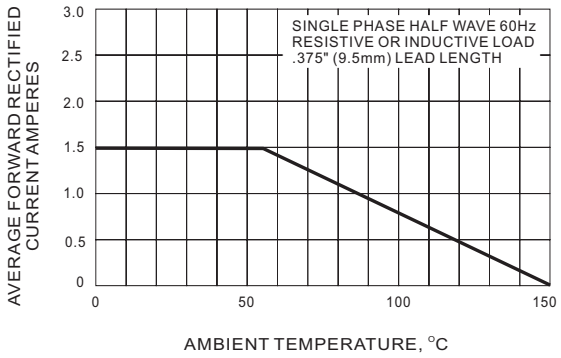


FIG.1 FORWARD CURRENT DERATING CURVE

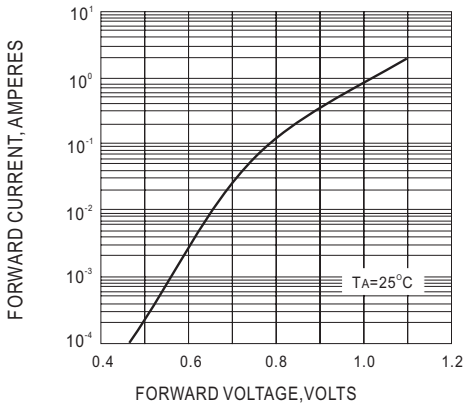


FIG.2 TYPICAL FORWARD CHARACTERISTICS

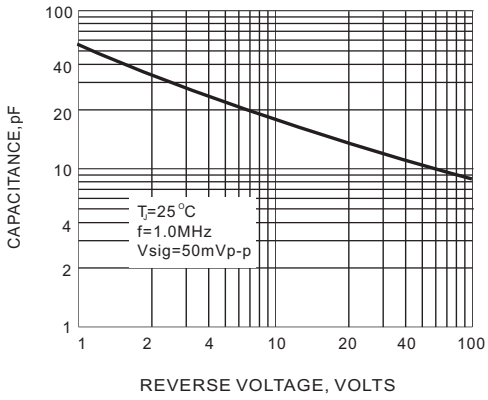


FIG.3 TYPICAL JUNCTION CAPACITANCE

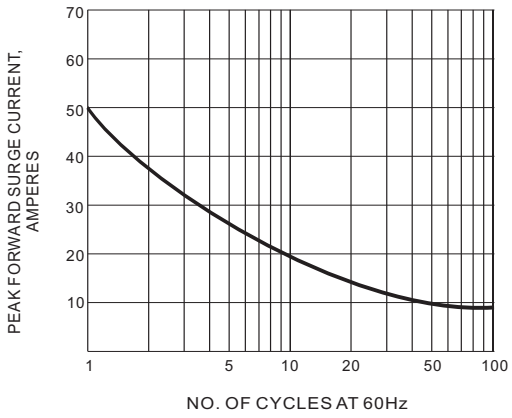


FIG.4 MAX NON-REPETITIVE SURGE CURRENT