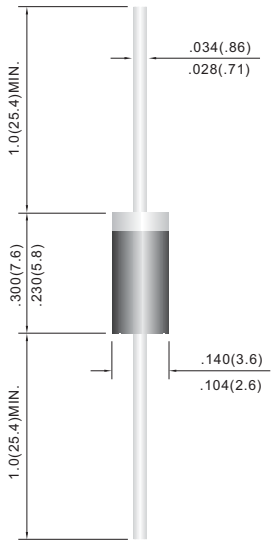
PS150R~PS1510R

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.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICALDATA

- 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.

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 T_A=55°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	1.3							V
Maximum DC Reverse Current T_J=25°C at Rated DC Blocking Voltage T_J=100°C	I_R	5.0 500							µA
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

PS150R~PS1510R

RATING AND CHARACTERISTIC CURVES

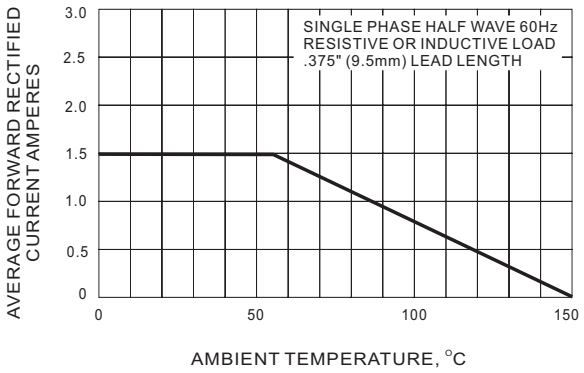


FIG.1 FORWARD CURRENT DERATING CURVE

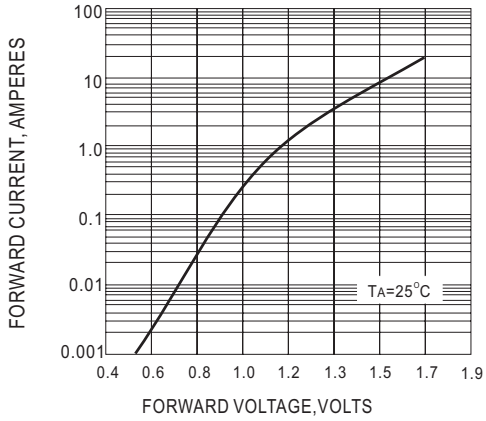


FIG.2 TYPICAL FORWARD CHARACTERISTICS

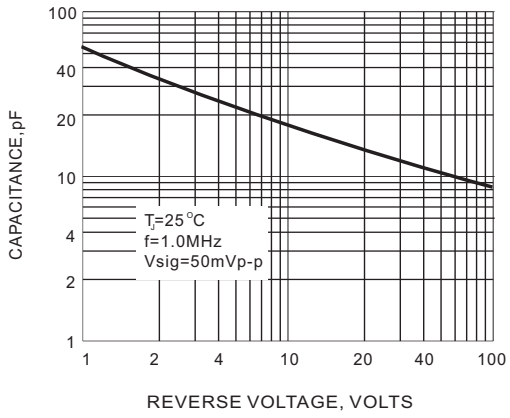


FIG.3 TYPICAL JUNCTION CAPACITANCE

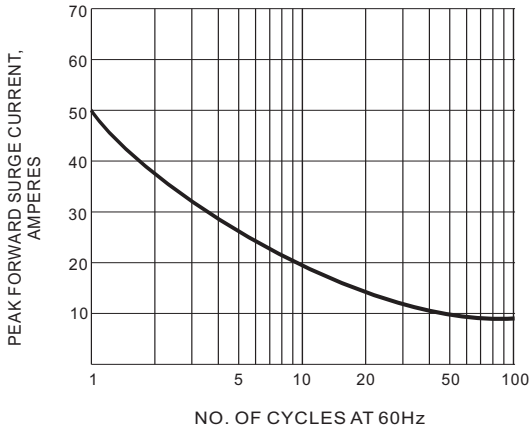


FIG.4 MAX NON-REPETITIVE SURGE CURRENT

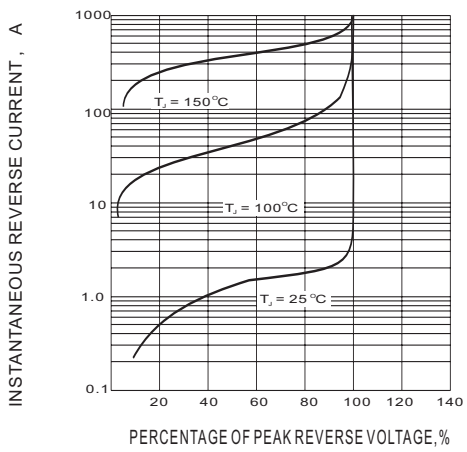


Fig.5-TYPICAL REVERSE CHARACTERISTIC