

DATA SHEET

PS150R~PS1510R

FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE	50 to 1000 Volts	CURRENT	1.5 Amperes
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DO-15	Unit: inch(mm)
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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

MECHANICAL DATA

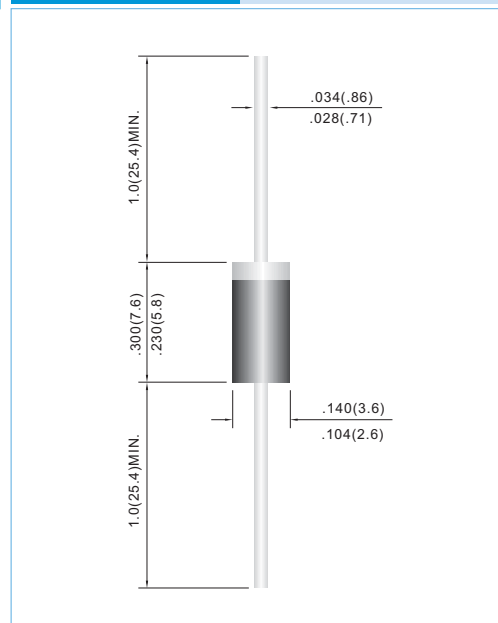
Case: Molded plastic, DO-15

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)	RθJA	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

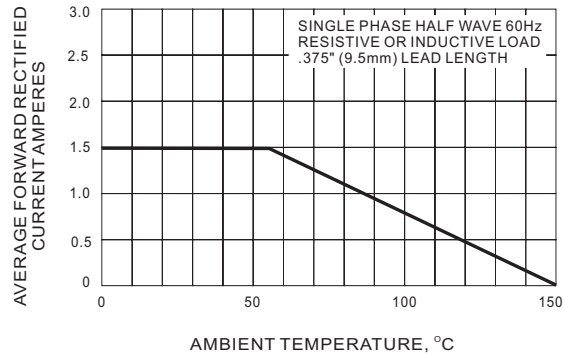


FIG. 1 FORWARD CURRENT DERATING CURVE

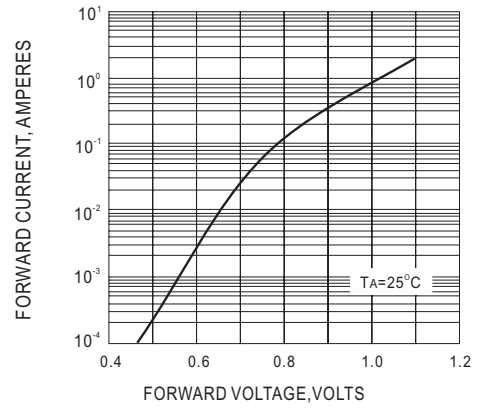


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

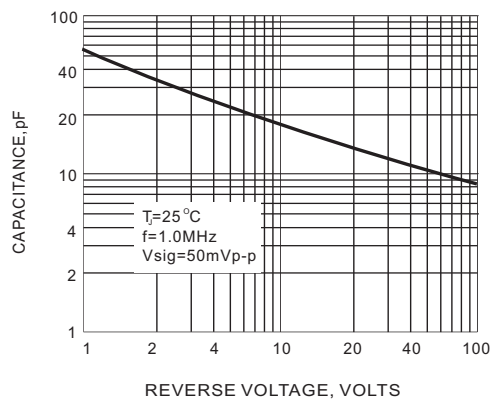


FIG. 3 TYPICAL JUNCTION CAPACITANCE

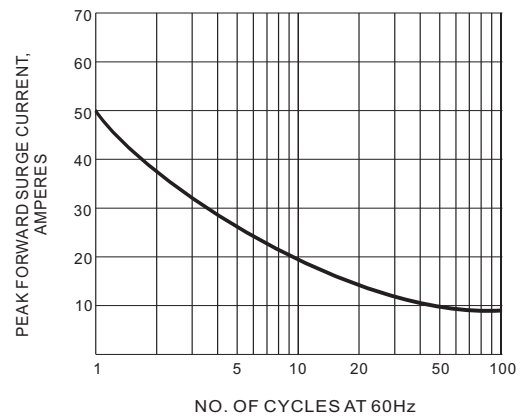


FIG. 4 MAX NON-REPETITIVE SURGE CURRENT