PG150R THRU PG158R

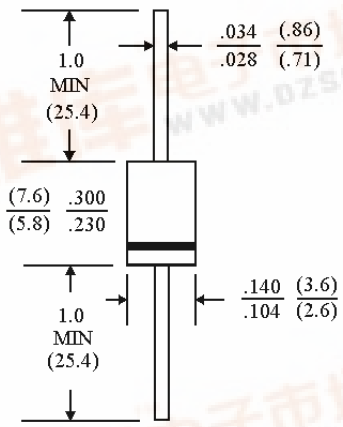
GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 1.5 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- 1.5 ampere operation at T_A=55 ¢J with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency
- Glass passivated junction in DO-15 package

DO-15



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-15

Terminals: axial leads, solderable per MIL-STD-202, Method 208

Polarity: denotes cathode

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

	PG150R	PG151R	PG152R	PG154R	PG156R	PG158R	UNITS
Peak Reverse Voltage, Repetitive; V_{RM}	50	100	200	400	600	800	V
Maximum RMS Voltage	35	70	140	280	420	560	V
DC Reverse Voltage; V_R	50	100	200	400	600	800	V
Average Forward Current, IO @ T_A=55 ¢J 3.8"lead length 60 Hz, resistive or inductive load	1.5						A
Peak Forward Surge Current, I_{FM} (surge) 8.3msec. single half sine wave superimposed on rated load(JECEC method)	50						A
Maximum Forward Voltage V_F @1.5A, 25 ¢J	1.3						V
Maximum Reverse Current, @Rated T_a=25 ¢J Reverse Voltage T_a=100 ¢J	5.0 150						£g A
Typical Junction capacitance (Note 1) CJ	25						pF
Typical Thermal Resistance (Note 2) R £KJA	45						¢J/W
Reverse Recovery Time I_F=.5A, I_R=1A, Irr=.25A	150	150	150	150	250	500	ns
Operating and Storage Temperature Range	-55 to +150						¢J

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

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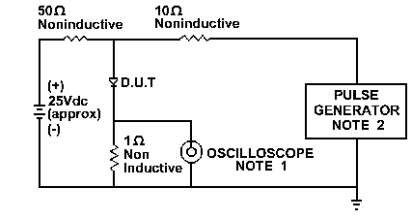

NOTE:1.Rise Time = 7ns max.
Input Impedance = 1 megohm. 22pF
2.Rise Time = 10ns max.
Source Impedance = 50 Ohms

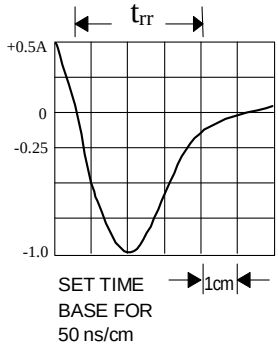

Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

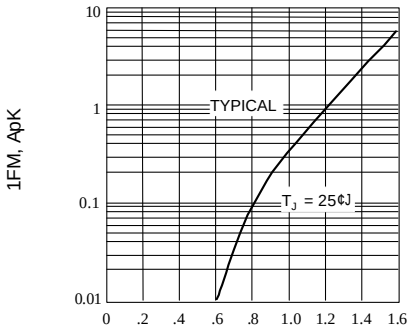

Fig. 2-FORWARD CHARACTERISTICS

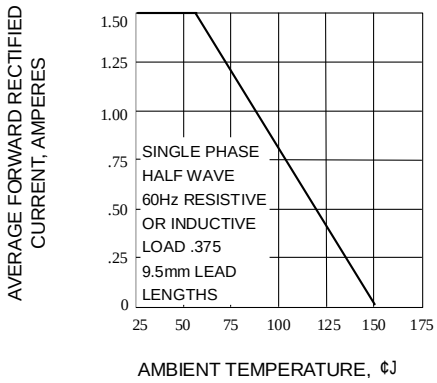

Fig. 3-FORWARD CURRENT DERATING CURVE

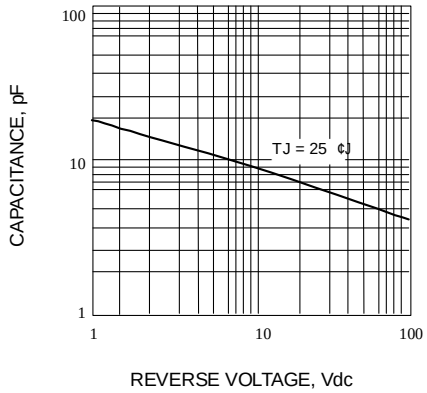

Fig. 4-TYPICAL JUNCTION CAPACITANCE vs. REVERSE VOLTAGE

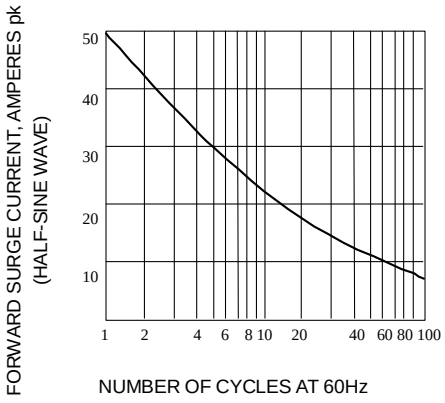

Fig. 5-PEAK FORWARD SURGE CURRENT