

**FAST RECOVERY RECTIFIERS**

**VOLTAGE RANGE: 100 --- 1000 V**  
**CURRENT: 2.0 A**

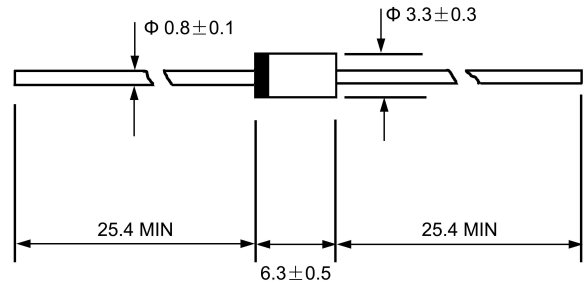
**FEATURES**

- ◇ Low cost
- ◇ Glass passivated junction.
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

**MECHANICAL DATA**

- ◇ Case: JEDEC DO-15, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.014 ounces, 0.39 grams
- ◇ Mounting position: Any

**DO - 15**



Dimensions in millimeters

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

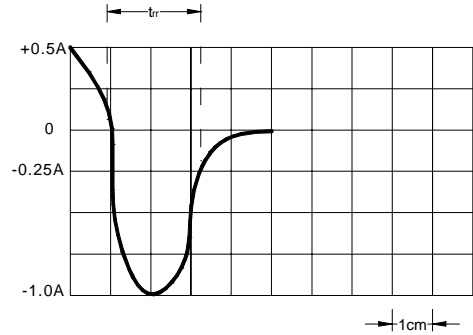
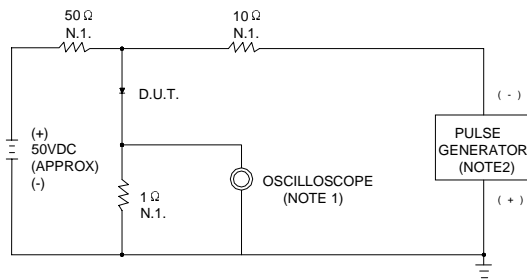
		PG 201	PG 202	PG 203	PG 204	PG 205	PG 206	PG 207	PG 208	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	100	200	300	400	500	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	210	280	350	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	100	200	300	400	500	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	2.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	$I_{FSM}$	70.0								A
Maximum instantaneous forward voltage @ 2.0 A	$V_F$	1.3								V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	$I_R$	5.0 100.0								$\mu A$
Maximum reverse recovery time (Note1)	$t_{rr}$	150					250	500		ns
Typical junction capacitance (Note2)	$C_J$	18								pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	45								$^\circ C/W$
Operating junction temperature range	$T_J$	- 55----- +150								$^\circ C$
Storage temperature range	$T_{STG}$	- 55----- + 150								$^\circ C$

NOTE:1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

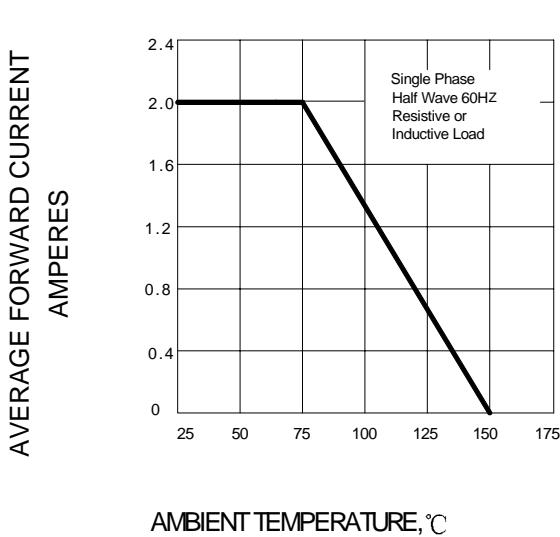
**FIG.1 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



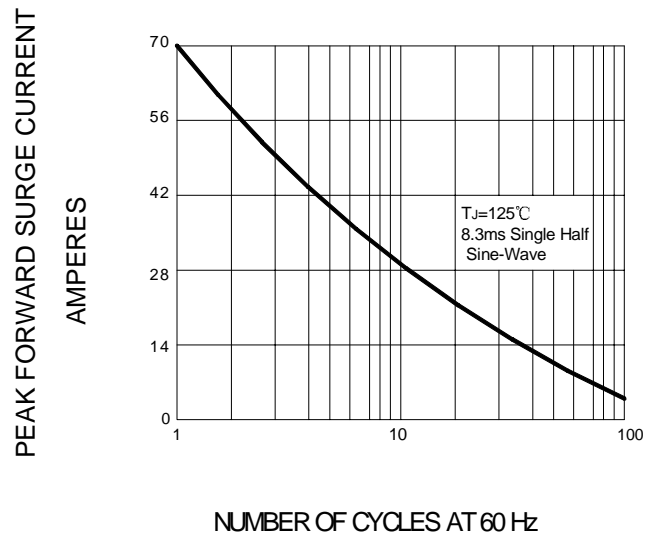
NOTES: 1. RISE TIME=75ns MAX. INPUT IMPEDANCE=1MΩ. 22pF  
 2. RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω

SET TIME BASE FOR 50/100/250 ns/cm

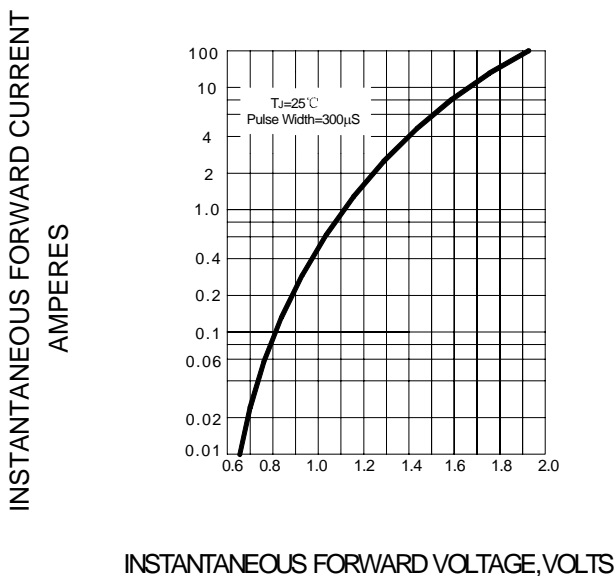
**FIG.2 – FORWARD CURRENT DERATING CURVE**



**FIG.3 – PEAK FORWARD SURGE CURRENT**



**FIG.4 – FORWARD CHARACTERISTICS**



**FIG.5 – TYPICAL JUNCTION CAPACITANCE**

