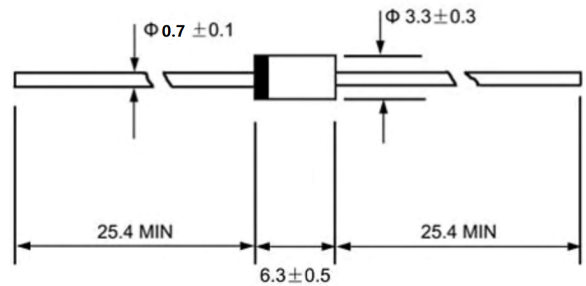




VOLTAGE RANGE: 50 --- 1000 V

CURRENT: 2.0 A

DO - 15



Dimensions in millimeters

Features

- ◇ Low cost
- ◇ Diffused 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-750, Method 2026
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.014 ounces, 0.39 grams
- ◇ Mounting position: Any

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%.

		RGP 20A	RGP 20B	RGP 20D	RGP 20G	RGP 20J	RGP 20K	RGP 20M	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 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}	80.0							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							μA
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 $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

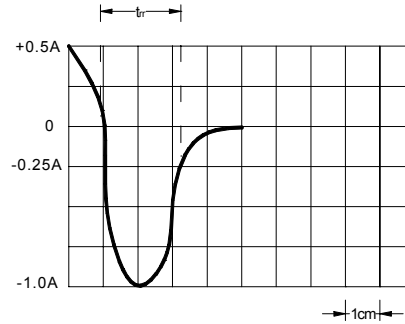
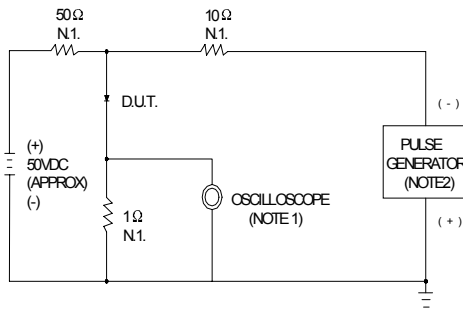
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.



Ratings AND Characteristic Curves

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



NOTES:1.RESE TIME=7ns MAX.INPUT IMPEDANCE=1MΩ.22pF.
2.RESE TIME=10ns MAX.SOURCE IMPEDANCE=500Ω.

SET TIME BASE FOR 50/100 ns /cm

FIG.2 –PEAK FORWARD SURGE CURRENT

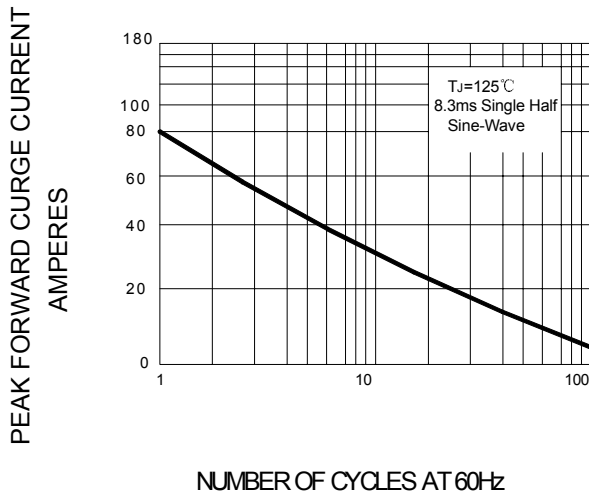


FIG.3–TYPICAL JUNCTION CAPACITANCE

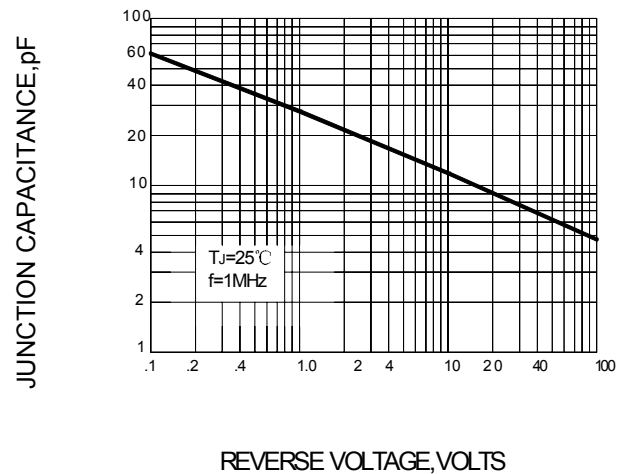


FIG.4–TYPICAL FORWARD CHARACTERISTICS

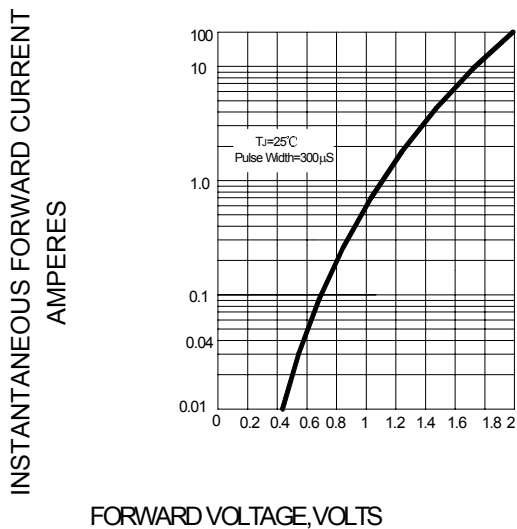
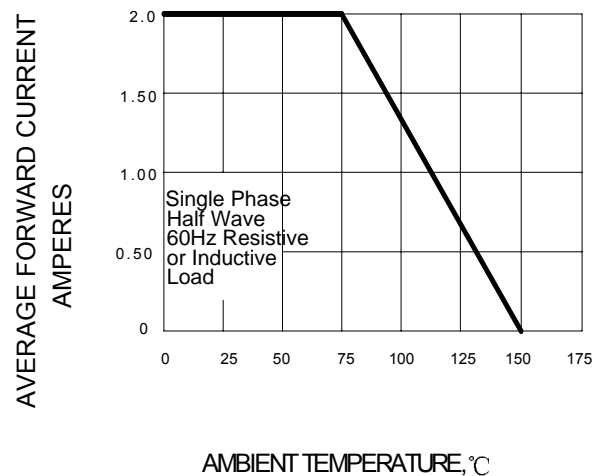


FIG.5–FORWARD CURRENT DERATING CURVE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-15	3000/AMMO	30000	42X28X31	12.00	10.00