



# DATA SHEET

## PG4933 thru PG4937

### GLASS PASSIVATED JUNCTION FAST RECOVERY PLASTIC RECTIFIER

**VOLTAGE** 50 to 600 Volts **CURRENT** 1.0 Amperes

DO-41

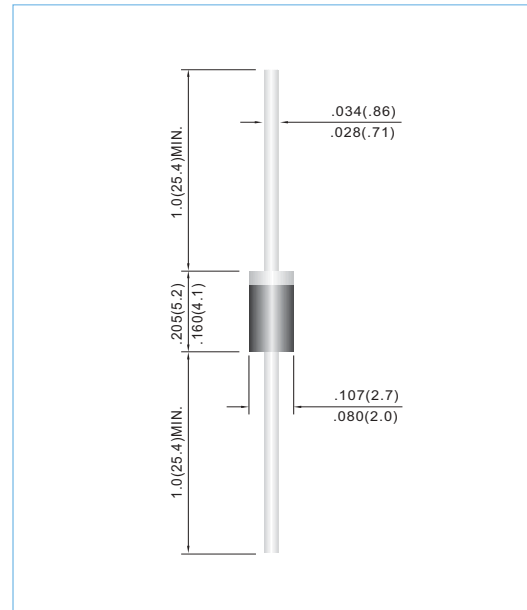
Unit: inch(mm)

#### FEATURES

- High current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency.
- Both normal and Pb free product are available :  
Normal : 80~95% Sn, 5~20% Pb  
Pb free: 98.5% Sn above

#### MECHANICAL DATA

Case: Molded plastic, DO-41  
Terminals: Axial leads, solderable to MIL-STD-202, Method 208  
Polarity: Color Band denotes cathode end  
Mounting Position: Any  
Weight: 0.012 ounce, 0.3 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

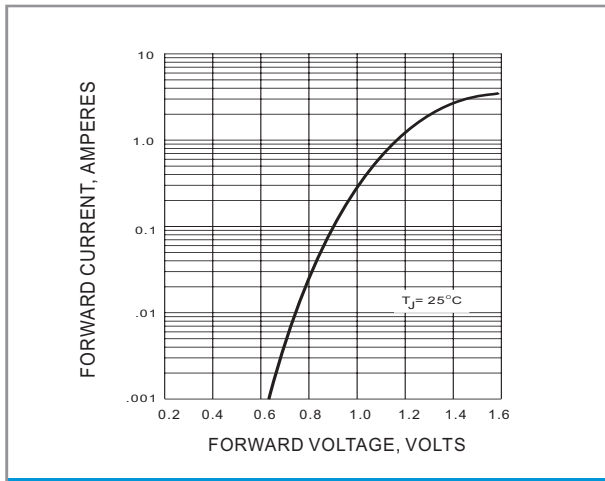
Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	PG4933	PG4934	PG4935	PG4936	PG4937	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	$I_{AV}$	1.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	30					A
Maximum Forward Voltage at 1.0A	$V_F$	1.2					V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	$I_R$	5.0 150					uA
Typical Junction capacitance (Note 2)	$C_J$	12					pF
Typical Thermal Resistance(Note 3)	$R_{\theta JA}$	67					°C / W
Maximum Reverse Recovery Time ( Note 1)	$T_{RR}$	200					ns
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 TO +150					°C

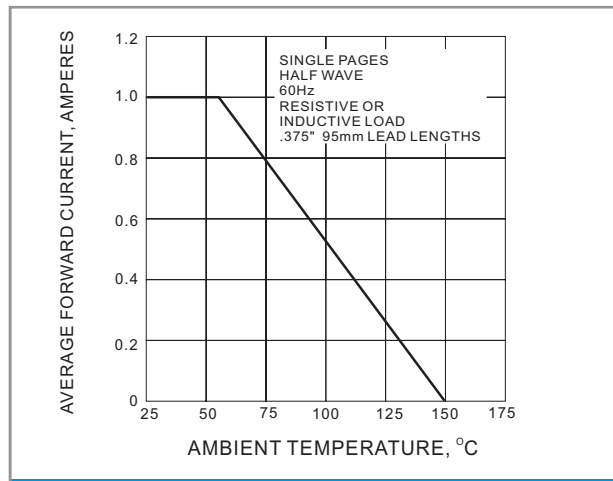
- NOTES:1. Reverse Recovery Test Conditions:  $I_F=5A$ ,  $I_R=1A$ ,  $I_{rr}=25A$   
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC  
3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted



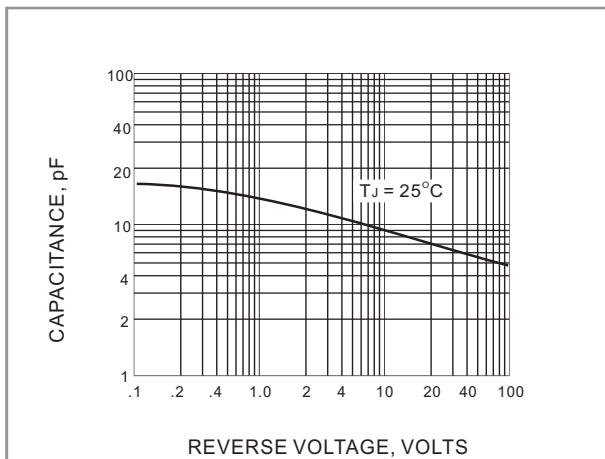
**RATING AND CHARACTERISTIC CURVES**



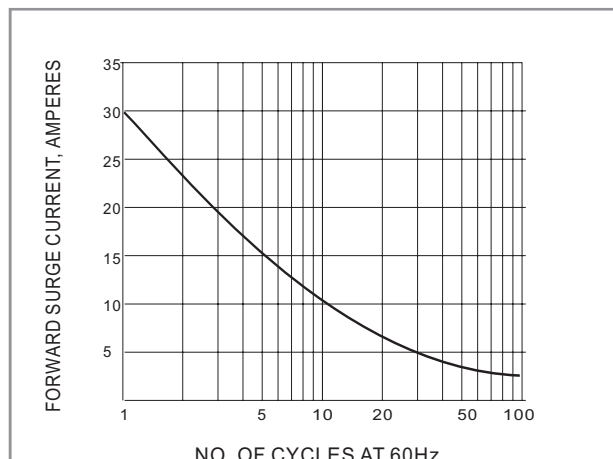
**FIG.1 FORWARD CHARACTERISTIC**



**FIG.2 FORWARD CURRENT DERATING CURVE**



**FIG.3 TYPICAL JUNCTION CAPACITANCE**



**FIG.4 PEAK FORWARD SURGE CURRENT**