PANJIT SEMI CONDUCTOR

DATA SHEET

PG100RS~PG108RS

GLASS PASSIVATED JUNCTION FAST RECOVERY RECTIFIERS

VOLTAGE 50 to 800 Volts **CURRENT** 1.0 Amperes

FEATURES

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

MECHANICALDATA

Case: Molded plastic, A-405

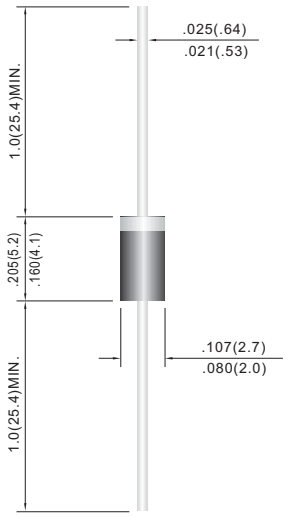
Terminals: Axial leads, solderable per MIL-STD-202,Method 208

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.008 ounce, 0.22 gram

A-405 Unit: inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	PG100RS	PG101RS	PG102RS	PG104RS	PG106RS	PG108RS	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current .375"(9.5mm) lead length at T_A=55°C	I_{AV}	1.0						A
Peak Forward Surge Current : 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30						A
Maximum Forward Voltage at 1.0A	V_F	1.3						V
Maximum DC Reverse Current T_A=25°C at Rated DC Blocking Voltage T_A=100°C	I_R	5.0 150						uA
Typical Junction capacitance (Note 1)	C_J	12						pF
Maximum Reverse Recovery Time	T_{RR}	150				250	500	ns
Typical Thermal Resistance	$R_{\theta JA}$	67						°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

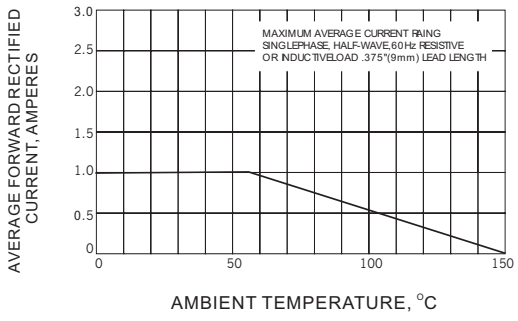


Fig.1 FORWARD CURRENT DERATING CURVE

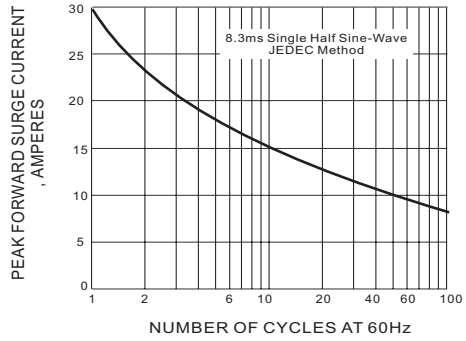


Fig.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

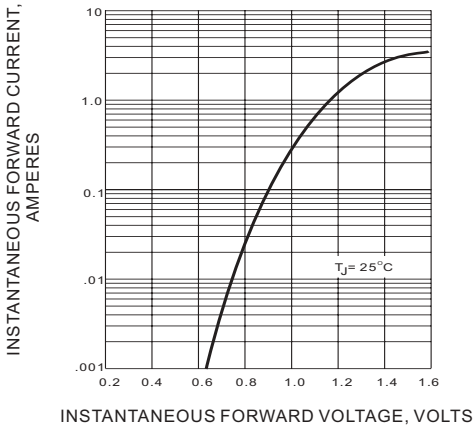


Fig.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

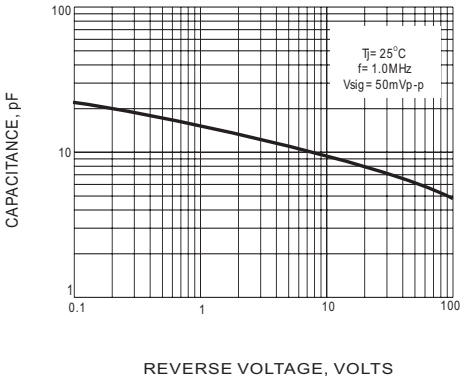


Fig.4 TYPICAL JUNCTION CAPACITANCE