

PG4933 THRU PG4937

GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER VOLTAGE - 50 to 600 Volts CURRENT - 1.0 Ampere

FEATURES

- High surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- 1.0 ampere operation at $T_A=55\text{ }^\circ\text{C}$ with no thermal runaway
- Fast switching for high efficiency
- Exceeds environmental standards of MIL-S-19500/228
- Glass passivated junction in DO-41 package

MECHANICAL DATA

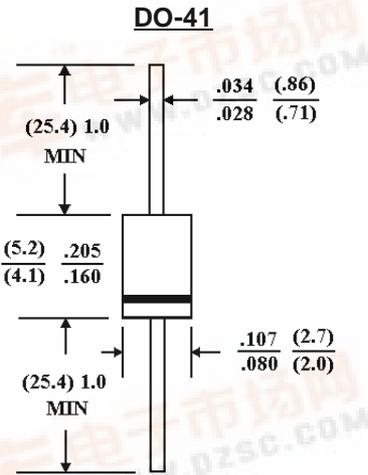
Case: Molded plastic, DO-41

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

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	PG4933	PG4934	PG4935	PG4936	PG4937	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	V
Maximum RMS Voltage	35	70	140	280	420	V
Maximum DC Blocking Voltage	50	100	200	400	600	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_A=55\text{ }^\circ\text{C}$	1.0					A
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load(JEDEC method)	30					A
Maximum Forward Voltage at 1.0A	1.2					V
Maximum Reverse Current $T_a=25\text{ }^\circ\text{C}$	5.0					µg A
at Rated DC Blocking Voltage $T_a=100\text{ }^\circ\text{C}$	150					µg A
Typical Junction capacitance (Note 1) CJ	12					pF
Typical Thermal Resistance (Note 3) R θJKJA	67					°C/W
Maximum Reverse Recovery Time(Note 2)	200					ns
Operating and Storage Temperature Range	-55 to +150					°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Reverse Recovery Test Conditions: $I_F=.5A$, $I_R=1A$, $I_{rr}=.25A$
3. 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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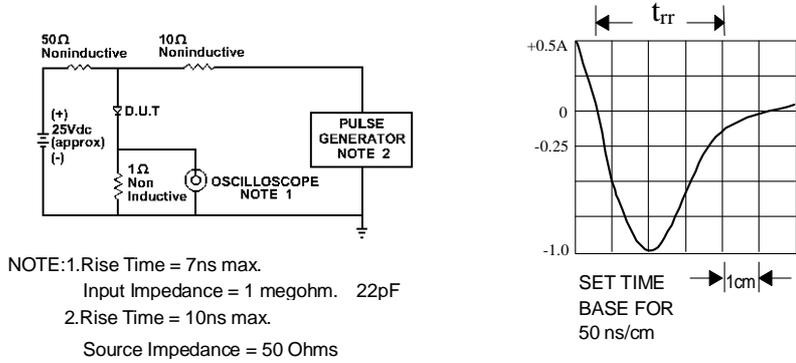


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

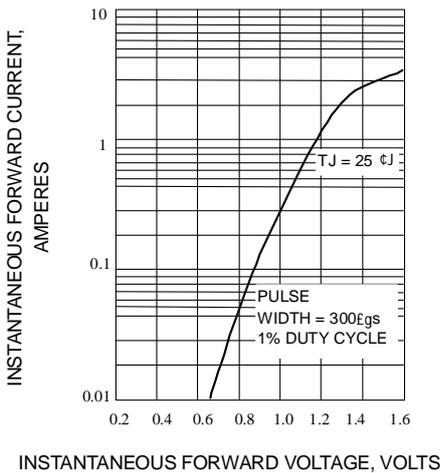


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

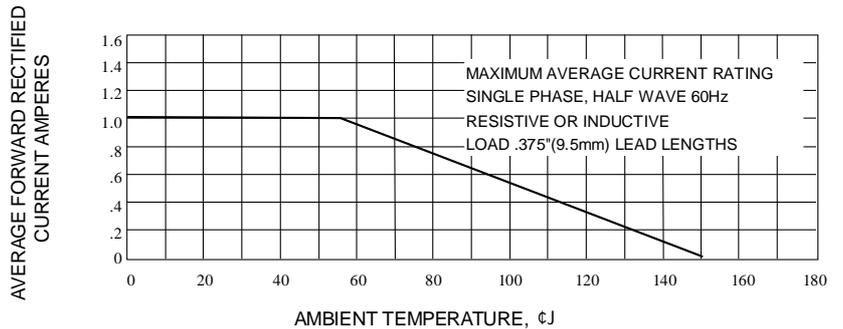


Fig. 3-FORWARD CURRENT DERATING CURVE

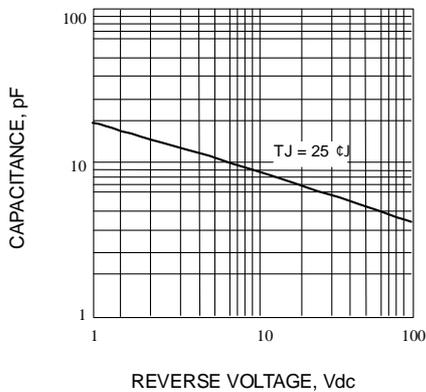


Fig. 4-TYPICAL JUNCTION CAPACITANCE

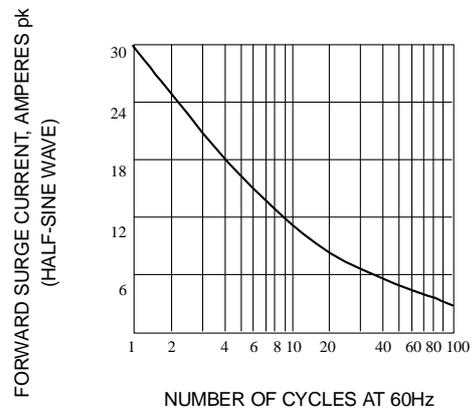


Fig. 5-PEAK FORWARD SURGE CURRENT