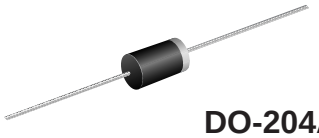
GENERAL SEMICONDUCTOR®

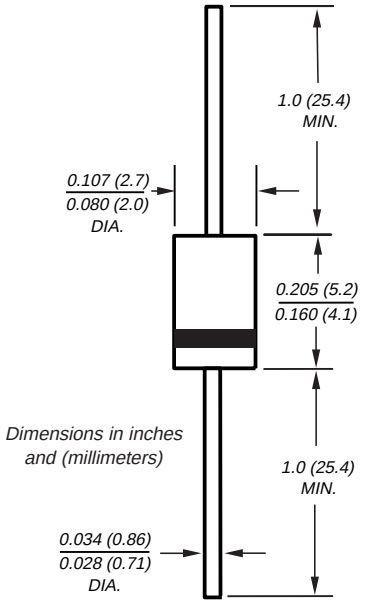
GPP10A thru GPP10M

Glass Passivated Junction Rectifiers

Reverse Voltage 50 to 1000V
Forward Current 1.0A



DO-204AL (DO-41)



New Product

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Glass passivated junction
- Capable of meeting environmental standards of MIL-S-19500
- 1.0A operation at T_A = 75°C with no thermal runaway
- Typical I_R less than 0.1µA

Mechanical Data

Case: JEDEC DO-204AL, molded plastic over glass passivated chip

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.012oz., 0.3g

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GPP 10A	GPP 10B	GPP 10D	GPP 10G	GPP 10J	GPP 10K	GPP 10M	Unit
* Maximum repetitive 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 0.375" (9.5mm) lead length at T_A = 75°C	$I_{F(AV)}$	1.0							A
* Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
* Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length T_A = 75°C	$I_{R(AV)}$	30							µA
Typical thermal resistance(1)	$R_{\theta JA}$ $R_{\theta JL}$	50 25							°C/W
* Operating junction and storage temperature range	T_J, T_{STG}	–55 to +150							°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GPP 10A	GPP 10B	GPP 10D	GPP 10G	GPP 10J	GPP 10K	GPP 10M	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							V
* Maximum DC reverse current T_A = 25°C at rated DC blocking voltage T_A = 100°C	I_R	5.0 50							µA
Maximum junction capacitance at 4.0V, 1MHz	C_J	15							pF

Notes: (1) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted
*JEDEC registered values

2/28//01

Ratings and Characteristic Curves

Fig. 1 – Forward Current Derating Curve

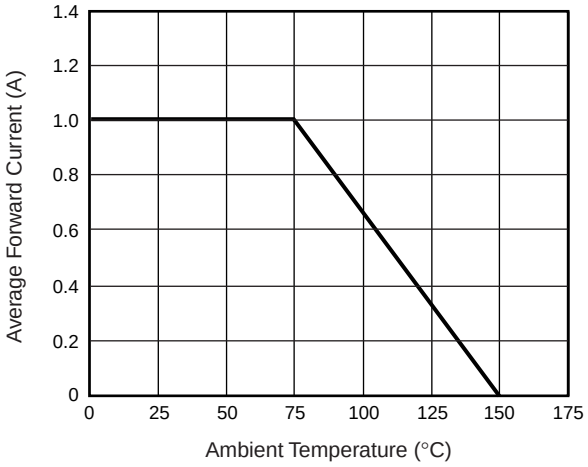


Fig. 2 – Typical Instantaneous Forward Characteristics

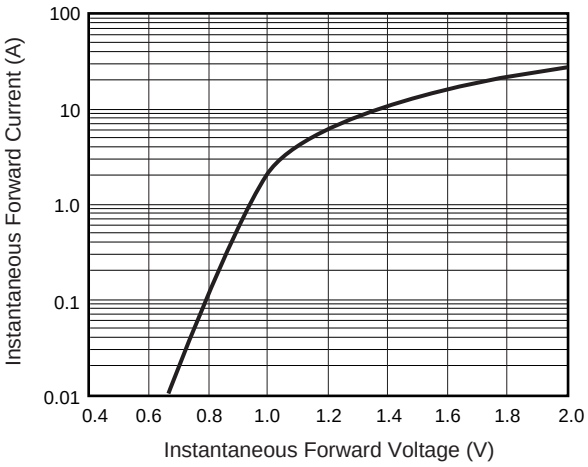


Fig. 3 – Typical Reverse Characteristics

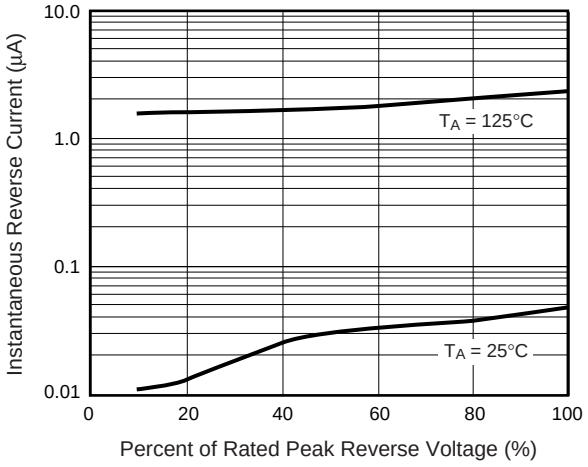


Fig. 4 – Typical Junction Capacitance