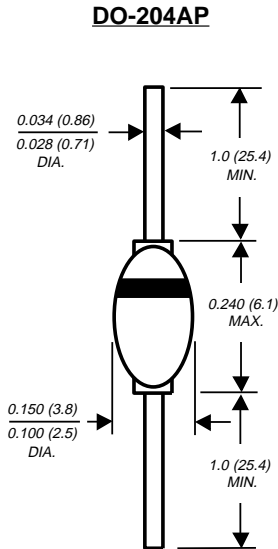


G2A THRU G2M

GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Amperes

PATENTED*



Dimensions in inches and (millimeters)

* Brazed-lead assembly is covered by Patent No. 3,930,306

FEATURES

- ◆ High temperature metallurgically bonded construction
- ◆ Glass passivated cavity-free junction
- ◆ Hermetically sealed package
2.0 Ampere operation at $T_A=75^\circ\text{C}$ with no thermal runaway
- ◆ Typical I_R less than $0.1\mu\text{A}$
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ High temperature soldering guaranteed:
 $350^\circ\text{C}/10$ seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



MECHANICAL DATA

Case: JEDEC DO-204AP solid glass body

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.02 ounce, 0.56 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	G2A	G2B	G2D	G2G	G2J	G2K	G2M	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts	
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	2.0							Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							Amps	
Maximum instantaneous forward voltage at 2.0A	V_F	1.2	1.1					Volts		
Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length at $T_A=100^\circ\text{C}$	$I_{R(AV)}$	100.0							μA	
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^\circ\text{C}$ 1.0					$T_A=150^\circ\text{C}$ 100.0			μA
Typical reverse recovery time (NOTE 1)	t_{rr}	1.5							μs	
Typical junction capacitance (NOTE 2)	C_J	15.0							pF	
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	55.0							$^\circ\text{C}/\text{W}$	
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175							$^\circ\text{C}$	

NOTES:

(1) Measured with $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length P.C.B mounted.

RATINGS AND CHARACTERISTIC CURVES G2A AND G2M

FIG. 1 - FORWARD CURRENT DERATING CURVE

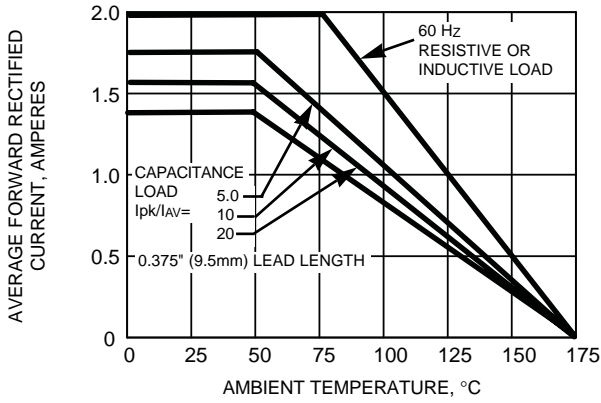


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

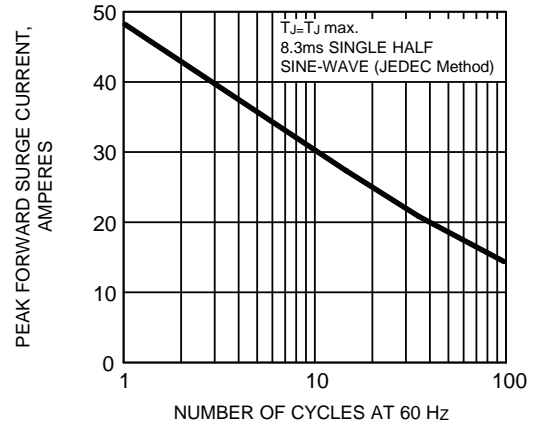


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

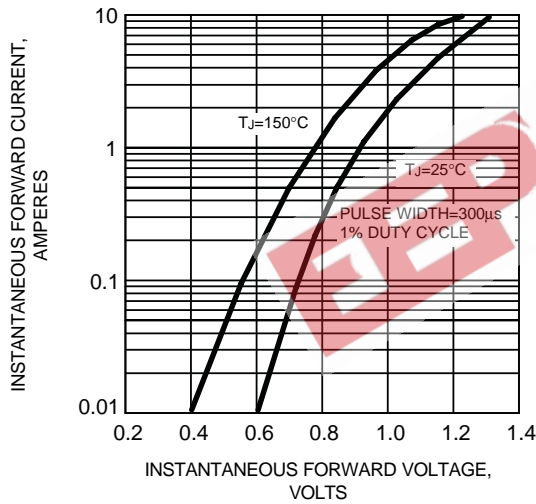


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

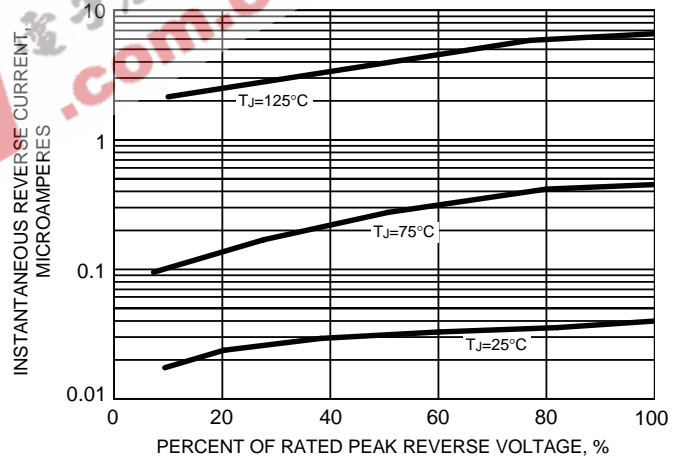


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

