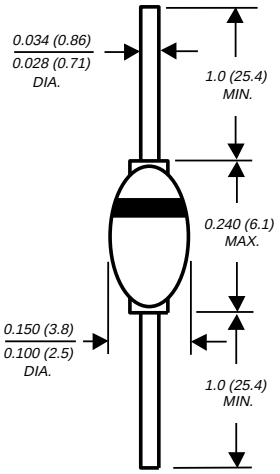
G1A THRU G1M

GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage *- 50 to 1000 Volts* ***Forward Current*** *- 1.0 Ampere*

PATENTED*

DO-204AP



Dimensions in inches and (millimeters)

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

FEATURES

- High temperature metallurgically bonded constructed rectifiers
- Glass passivated cavity-free junction in D0-204AP package
- Hermetically sealed package
- 1.0 ampere operation at T_A=100°C with no thermal runaway
- Typical I_R less than 0.1µA
- Capable of meeting environmental standards of MIL-S-19500
- High temperature soldering guaranteed: 350°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	G1A	G1B	G1D	G1G	G1J	G1K	G1M	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	70	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375” (9.5mm) lead length at T_A=100°C	$I_{(AV)}$	1.0							Amp
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 1.0A	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°C	$I_{R(AV)}$	200.0							µA
Maximum DC reverse current at rated DC blocking voltage T_A=25°C / T_A=150°C	I_R	2.0 / 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)	$R_{\Theta JL}$	55.0							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	65 to +175							°C

NOTES:
(1) Measured with I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
(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

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RATINGS AND CHARACTERISTIC CURVES G1A AND G1M

FIG. 1 - FORWARD CURRENT DERATING CURVE

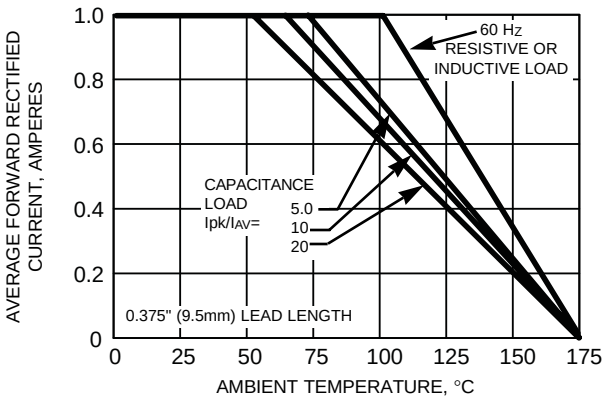


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

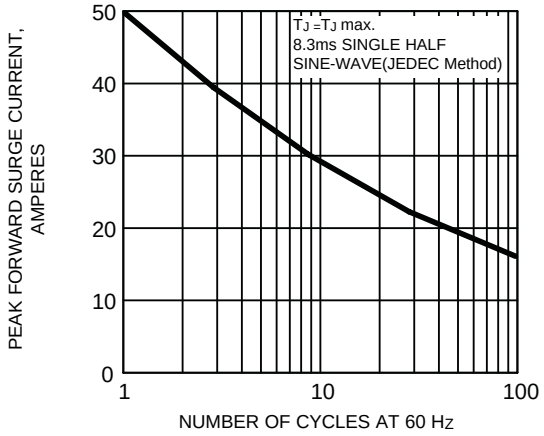


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

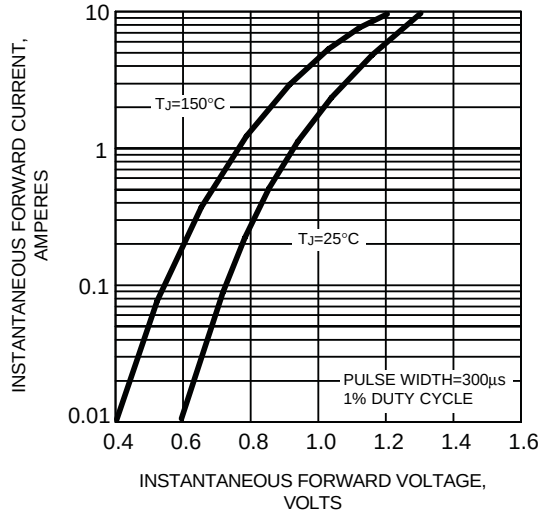


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

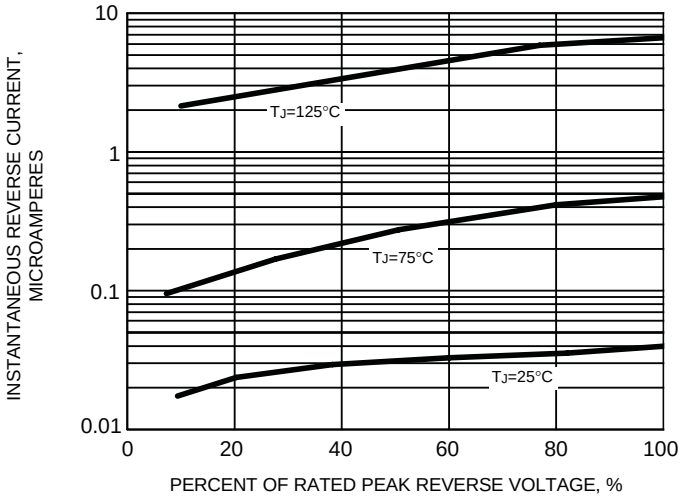
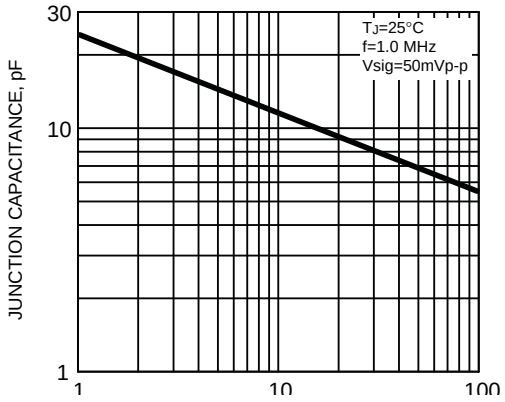


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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