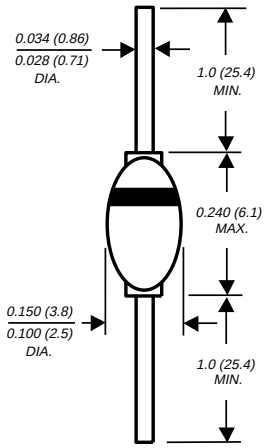
CG1 AND DG1

MINIATURE CLAMPER / DAMPER GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - *1400 to 1500 Volts* ***Forward Current -*** *1.5 Amperes*

PATENTED*

DO204AP



Dimensions in inches and (millimeters)

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

FEATURES

- Specially designed for clamping circuits horizontal deflection systems and damper applications
- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- 1.5 Ampere operation at T_A=50°C with no thermal runaway
- Typical I_R less than 0.1µA
- Hermetically sealed package
- 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	*CG1*	*DG1*	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	1400	1500	Volts
Maximum RMS voltage	V_{RMS}	980	1050	Volts
Maximum DC blocking voltage	V_{DC}	1400	1500	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A=50°C	$I_{(AV)}$	1.5		Amps
Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	40.0		Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.1		Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=100°C	I_R	5.0 100		µA
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at T_A=100°C	$I_{R(AV)}$	50.0		µA
Maximum reverse recovery time (NOTE 1)	t_{rr}	15.0	20.0	µs
Typical junction capacitance (NOTE 2)	C_J	15.0		pF
Typical thermal resistance (NOTE 3)	$R_{\Theta JA}$	55.0		°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175		°C

NOTES:
(1) Reverse recovery test conditions: I_F=0.5A, I_R=50mA
(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 CG1 AND DG1

FIG. 1 - FORWARD CURRENT DERATING CURVE

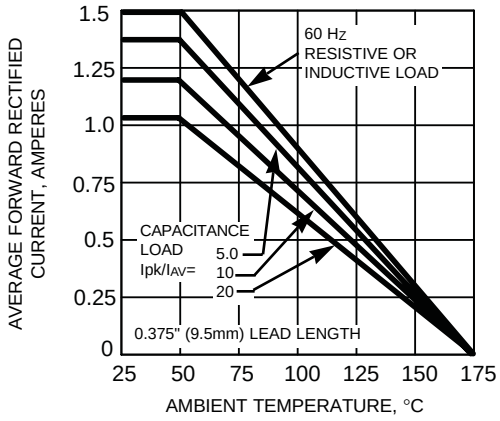


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

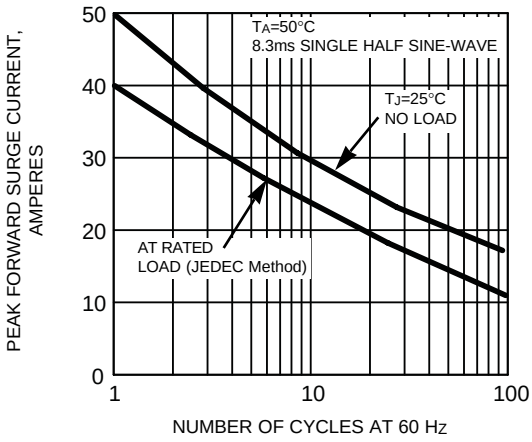


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

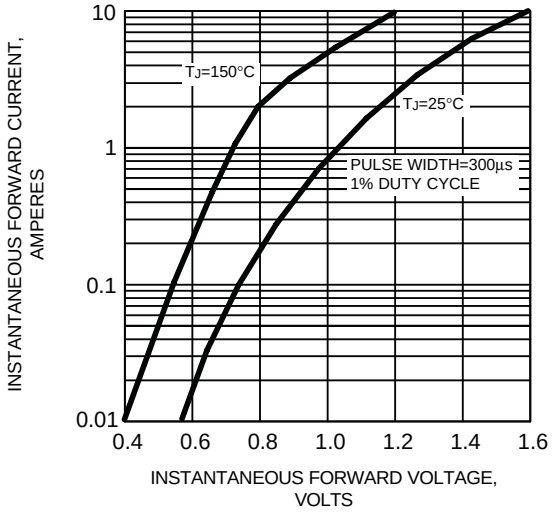


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

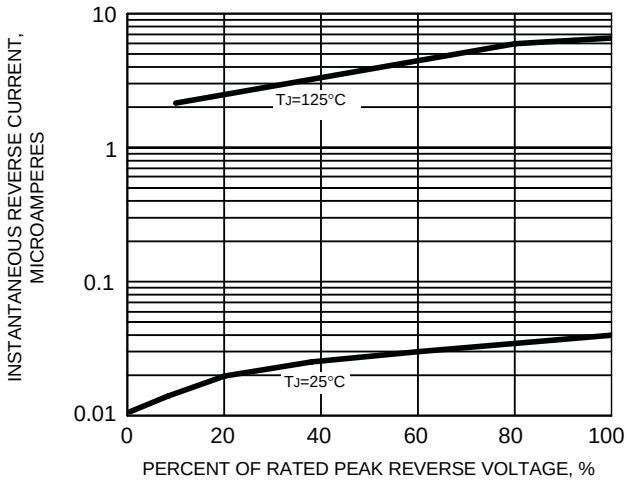
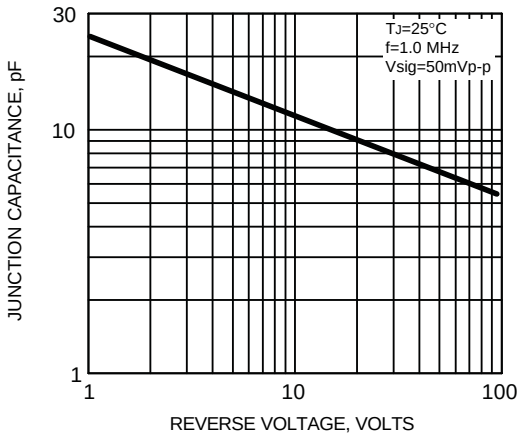


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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