# CG2 AND DG2

## MINIATURE CLAMPER / DAMPER GLASS PASSIVATED RECTIFIER

Reverse Voltage - 1400 to 1500 Volts Forward Current - 2.0 Amperes



Dimensions in inches and (millimeters)

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

FEATURES

- Specially designed for clamping circuits in horizontal deflection systems and damper applications
- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- ◆ 2.0 Ampere operation at T<sub>A</sub>=50°C with no thermal runaway
- Typical I<sub>R</sub> 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 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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	SYMBOLS	CG2	DG2	UNITS
Maximum repetitive peak reverse voltage	Vrrm	1400	1500	Volts
Maximum RMS voltage	VRMS	980	1050	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	1400	1500	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA=50°C	I(AV)	2.0		Amps
Peak forward surge current 8.3ms single half sine -wave superimposed on rated load (JEDEC Method)	IFSM	40.0		Amps
Maximum instantaneous forward voltage at 2.0A	VF	1.1		Volts
Maximum DC reverse currentTA=25°Cat rated DC blocking voltageTA=100°C	IR	5.0 100.0		μΑ
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at T <sub>A</sub> =100°C	I <sub>R(AV)</sub>	200.0		μΑ
Maximum reverse recovery time (NOTE 1)	trr	15.0	20.0	μs
Typical junction capacitance (NOTE 2)	CJ	15.0		pF
Typical thermal resistance (NOTE 3)	Røja	55.0		°C/W
Operating junction and storage temperature range	TJ, TSTG	-65 to +175		°C

#### NOTES:

(1) Measured with IF=0.5A, IR=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



#### **RATINGS AND CHARACTERISTIC CURVES CG2 AND DG2**





FORWARD CHARACTERISTICS 10 INSTANTANEOUS FORWARD CURRENT, AMPERES TJ=25°C Tj=150°C PULSE WIDTH=300µs 1% DUTY CYCLE 0.1 0.0 0.4 0.6 0.8 1.0 1.2 1.4 1.6 INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 3 - TYPICAL INSTANTANEOUS

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS





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