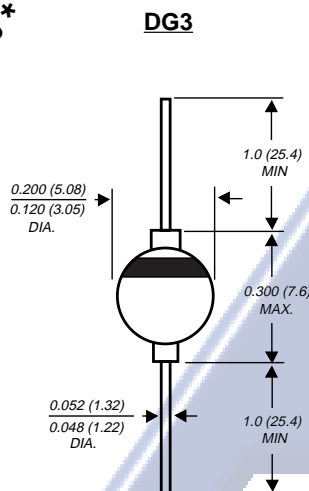


CG3 AND DG3

CLAMPER / DAMPER GLASS PASSIVATED RECTIFIER

Reverse Voltage - 1400 to 1500 Volts Forward Current - 3.0 Amperes

PATENTED *



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
- ♦ 3.0 Ampere operation at $T_A=50^\circ\text{C}$ with no thermal runaway
- ♦ Typical I_R less than $0.1\mu\text{A}$
- ♦ Hermetically sealed package
- ♦ 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: 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: 0.04 ounce, 1.1 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	CG3	DG3	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 $T_A=50^\circ\text{C}$	$I_{(AV)}$	3.0		Amps
Peak forward surge current 8.3ms single half sinewave superimposed on rated load (JEDEC Method) at $T_A=50^\circ\text{C}$	I_{FSM}	100.0		Amps
Maximum instantaneous forward voltage at 3.0A	V_F	1.2		Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 100.0		μA
Maximum full load reverse current full cycle average, 0.375" (9.5mm) lead length at $T_A=70^\circ\text{C}$	$I_{R(AV)}$	200.0		μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	15.0	20.0	μs
Typical junction capacitance (NOTE 2)	C_J	40.0		pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	20.0		$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175		$^\circ\text{C}$

NOTES:

(1) Measured with $I_F=0.5\text{A}$, $I_R=50\text{mA}$

(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, with leads attached to heat sinks

RATINGS AND CHARACTERISTIC CURVES CG3 AND DG3

FIG. 1 - FORWARD CURRENT DERATING CURVE

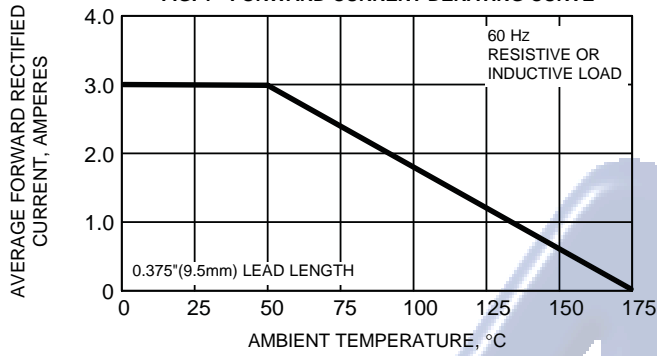


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

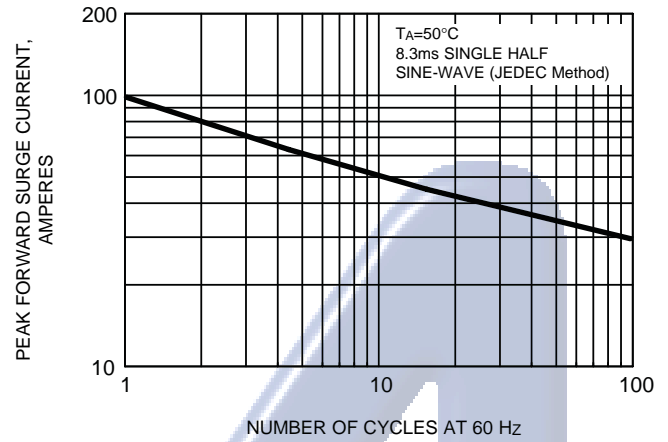


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

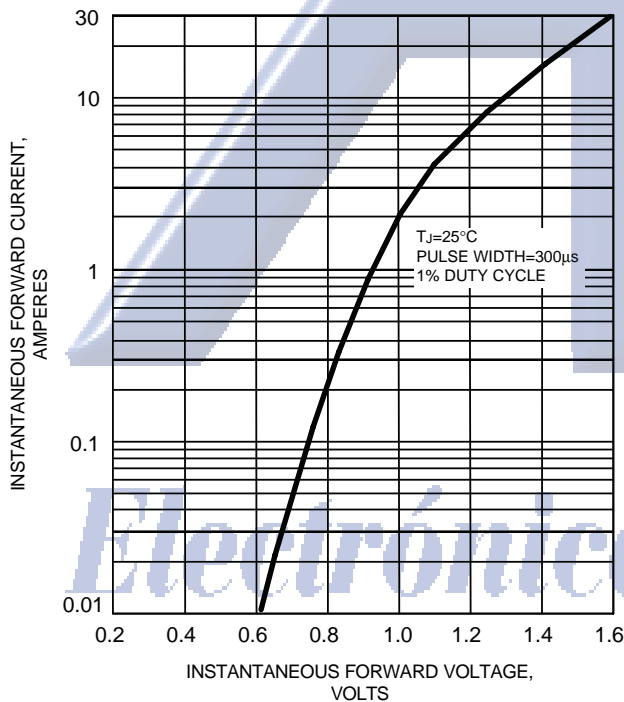


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

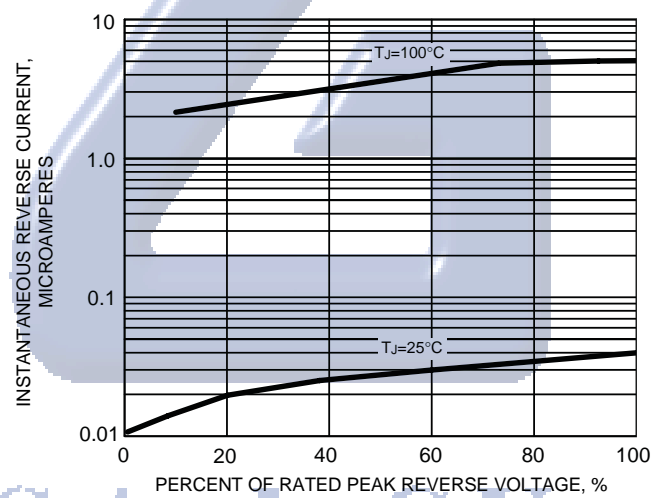


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

