


T-03-09

HVG1 THRU HVG4
HIGH-VOLTAGE GLASS PASSIVATED SILICON RECTIFIERS

GENERAL INSTRUMENT



FEATURES

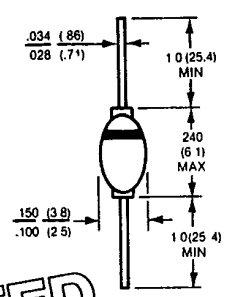
- High temperature metallurgically bonded
- Glass passivated cavity-free junction in a DO-204AP package
- High Conductance
- Typical I_R less than $1 \mu A$
- Hermetically sealed package
- Capable of meeting environmental standards of MIL-S-19500
- High temperature soldering guaranteed $350^\circ C/10$ seconds/.375", (9.5mm) lead length at 5 lbs., (2.3kg) tension

MECHANICAL DATA

Case: One piece glass, hermetically sealed
 Terminals: Axial leads, solderable per MIL-STD-202, Method 208
 Polarity: Color band denotes cathode
 Mounting Position: Any
 Weight: .02 ounce, .56 gram

VOLTAGE RANGE
1000 to 4000 Volts

CURRENT
300 Milliampères



PATENTED
 Brazed lead assembly is covered by Patent No. 3,930,306 of 1976 and glass composition by Patent No. 3,752,701 of 1973

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25^\circ C$ ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load
 For capacitive load, derate current by 20%

	HVG1	HVG2	HVG3	HVG4	UNITS
Maximum Recurrent Peak Reverse Voltage	1000	2000	3000	4000	V_{RRM}
Maximum RMS Voltage	700	1400	2100	2800	V_{RMS}
Maximum DC Blocking Voltage	1000	2000	3000	4000	V_{DC}
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length at $T_A = 55^\circ C$	300				$mA_{(AV)}$
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) $T_A = 55^\circ C$	20				A_{pk}
Maximum Instantaneous Forward Voltage at	3.0				V_{pk}
Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0 50.0				μA
Typical Reverse Recovery Time (Note 1)	2.0				μs
Typical Junction Capacitance (Note 2)	3.0				pF
Operating and Storage Temperature Range T_J, T_{stg}	-65 to +175				$^\circ C$

NOTES
 1. Measured with $I_F = 5A, I_R = 10A, I_{rc} = 25A$.
 2. Measured at 10 MHz and applied reverse voltage of 40VDC

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**RATING AND CHARACTERISTIC CURVES
HVG1 THRU HVG4**

