

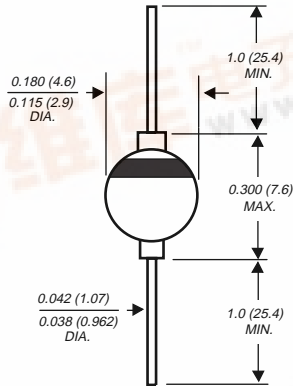
RG4A THRU RG4J

GLASS PASSIVATED FAST SWITCHING RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 3.0 Amperes

PATENTED *

Case Style G4

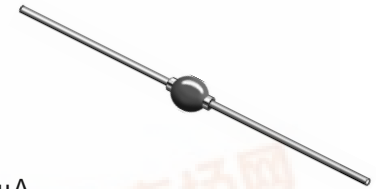


Dimensions in inches and (millimeters)

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

FEATURES

- ♦ High temperature metallurgically bonded construction
- ♦ Glass passivated cavity-free junction
- ♦ Capable of meeting environmental standards of MIL-S-19500
- ♦ Fast switching for fast efficiency
- ♦ 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
- ♦ 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: 0.037 ounce, 1.04 grams

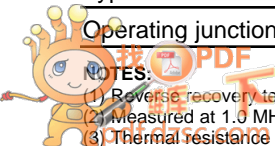
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	RG4A	RG4B	RG4D	RG4G	RG4J	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead lengths at $T_A=55^{\circ}\text{C}$	$I_{(AV)}$	3.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100.0					Amps
Maximum instantaneous forward voltage at 3.0A	V_F	1.3					Volts
Maximum reverse current at rated DC blocking voltage	I_R	5.0					μA
Maximum average reverse current at peak reverse voltage	$I_{R(AV)}$	2.0 100.0					μA
		$T_A=25^{\circ}\text{C}$ $T_A=100^{\circ}\text{C}$					
Maximum reverse recovery time (NOTE 1)	t_{rr}	150				250	ns
Typical junction capacitance (NOTE 2)	C_J	50.0					pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	22.0					$^{\circ}\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					$^{\circ}\text{C}$

NOTES:

- (1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
- (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 both leads to heat sink



RATINGS AND CHARACTERISTIC CURVES RG4A AND RG4J

