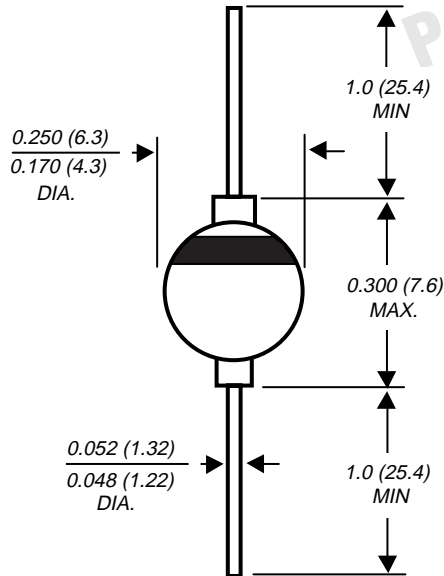


Glass Passivated Fast Switching Rectifier

Reverse Voltage 50 to 1000 V

Forward Current 3.0 A



Dimensions in inches and (millimeters)

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

Features

- High temperature metallurgically bonded construction
- Hermetically sealed package
- Cavity-free glass passivated junction
- 3.0 ampere operation at $T_A=55^\circ\text{C}$ with no thermal runaway
- Typical I_R less than $0.1\mu\text{A}$
- Capable of meeting environmental standards of MIL-S-19500
- Fast switching for high efficiency
- High temperature soldering guaranteed:
350°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 & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	RG3A	RG3B	RG3D	RG3G	RG3J	RG3K	RG3M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Maximum average reverse current, at rated peak reverse voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_{R(AV)}$	2.0 100							μA
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	55							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175							$^\circ\text{C}$

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	RG3A	RG3B	RG3D	RG3G	RG3J	RG3K	RG3M	UNITS
Maximum instantaneous forward voltage at 3.0A	V_F	1.3							V
Maximum DC reverse current at rated DC blocking voltage	I_R	5.0							μA
Maximum reverse recovery time at at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $t_{rr}=0.25\text{A}$	t_{rr}	150				250	400	500	ns
Typical junction capacitance at 4.0V, 1MHz	C_J	40							pF

NOTES:

(1) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, with both leads attached to heat sink

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

