

# RG3J-10

## GLASS PASSIVATED JUNCTION RECTIFIER

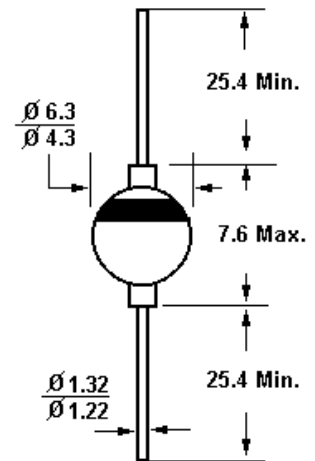
Forward Current – 3.0 Amperes

### Features

- Cavity-free glass passivated junction
- High temperature metallurgically bonded construction
- 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.

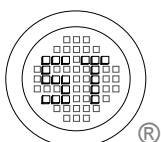


Dimensions in mm

**Absolute Maximum Ratings and Characteristics** Ratings at 25°C ambient temperature unless otherwise specified.

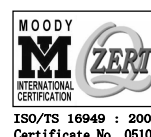
	Symbols	Value	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	Volts
Maximum RMS voltage	$V_{RMS}$	280	Volts
Maximum DC blocking voltage	$V_{DC}$	400	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=70^\circ\text{C}$	$I_{F(AV)}$	3	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	125	Amps
Maximum full load reverse current, full cycle average, 0.375"(9.5mm)lead length at $T_A=70^\circ\text{C}$	$I_{R(AV)}$	150	$\mu\text{A}$
Maximum instantaneous forward voltage at 3A $T_A = 25^\circ\text{C}$	$V_F$	1.3	Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A = 25^\circ\text{C}$ 5	$\mu\text{A}$
		$T_A = 175^\circ\text{C}$ 300	
Typical junction capacitance at 4V, 1MHz	$C_J$	40	pF
Typical thermal resistance (Note 1)	$R_{\theta JA}$	20	$^\circ\text{C/W}$
	$R_{\theta JL}$	10	
Operating junction temperature range	$T_J$	-65 to+175	$^\circ\text{C}$
Storage temperature range	$T_S$	-65 to+200	$^\circ\text{C}$

Notes: (1) Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length with both leads attached between heat sink.



## SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116

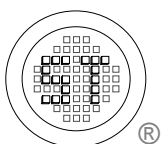
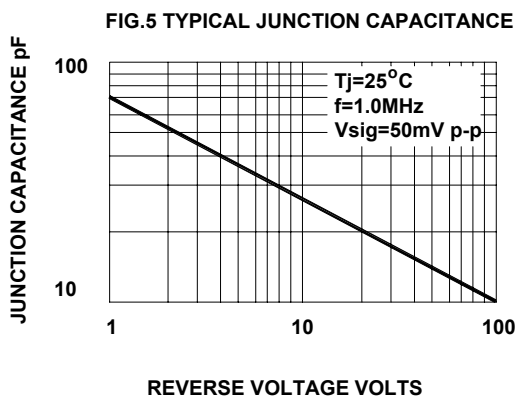
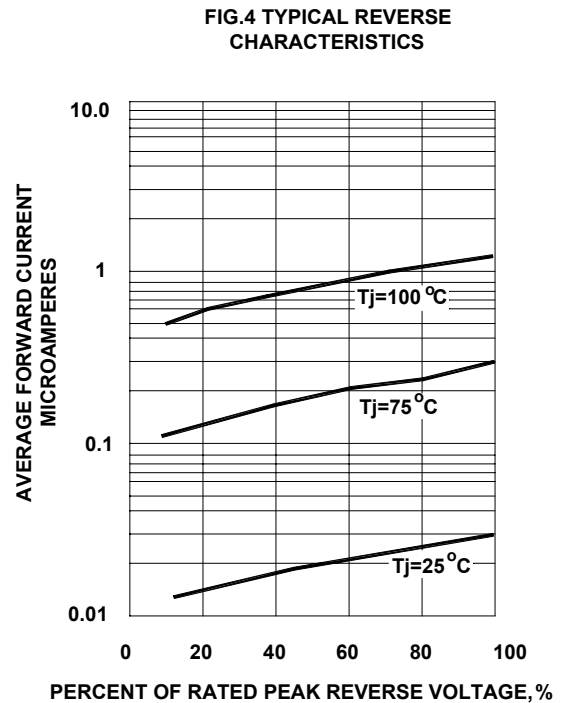
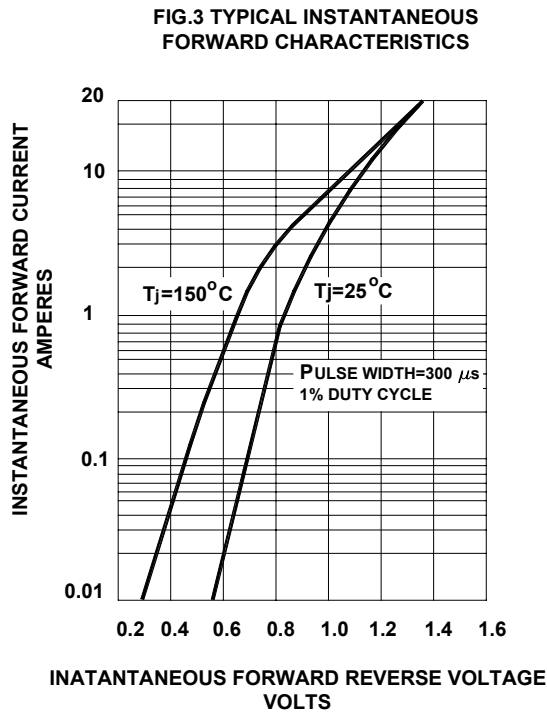
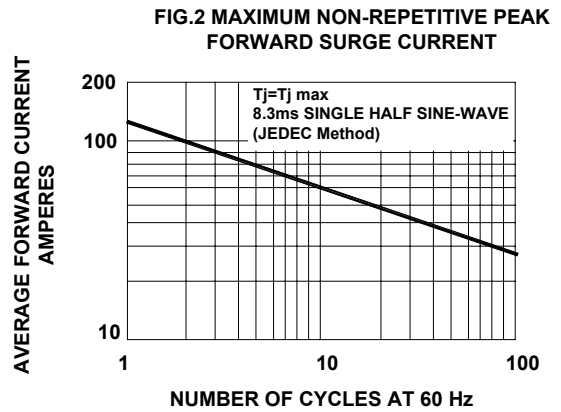
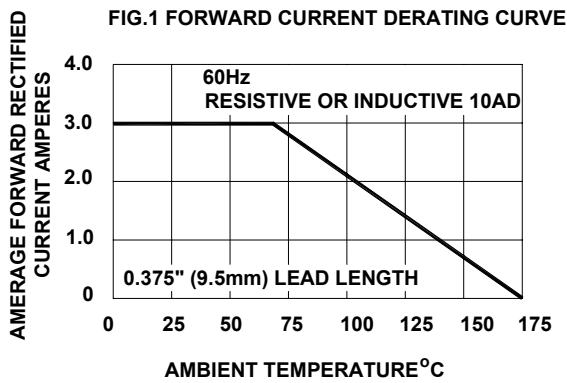


ISO 9001 : 2000  
Certificate No. 0367-106-01-001-01

Dated : 23/06/2003

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



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