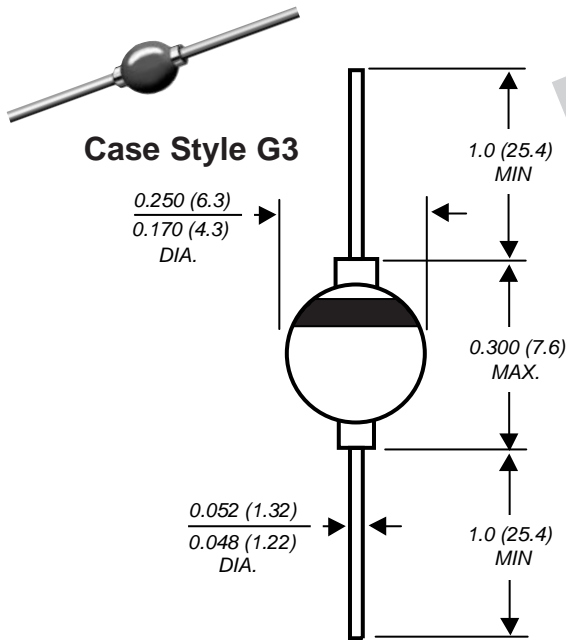


Glass Passivated Junction Rectifiers

Rev. Voltage 200 to 800V
Forward Current 3.0A


Dimensions in inches and (millimeters)

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

Patented*

Features

- Cavity-free glass passivated junction
- High temperature metallurgically bonded construction
- Hermetically sealed package
- Capable of meeting environmental standards of MIL-S-19500
- Typical I_R less than $0.1\mu A$
- 3.0 ampere operation at $T_A=70^\circ C$ with no thermal runaway
- High temperature soldering guaranteed: $350^\circ C/10$ 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 oz., 1.1 g

Maximum Ratings & Thermal Characteristics

 Ratings at $25^\circ C$ ambient temperature unless otherwise specified.

Parameter	Symbol	1N5624	1N5625	1N5626	1N5627	Unit
*Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	V
*Maximum DC blocking voltage	V_{DC}	200	400	600	800	V
*Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 70^\circ C$	$I_{F(AV)}$	3.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125				A
*Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead length at $T_A = 70^\circ C$	$I_{R(AV)}$	150	100			μA
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$ $R_{\theta JL}$	20 10				$^\circ C/W$
*Operating junction temperature range	T_J	-65 to +175				$^\circ C$
*Storage temperature range	T_{STG}	-65 to +200				$^\circ C$

Electrical Characteristics

 Ratings at $25^\circ C$ ambient temperature unless otherwise specified.

*Maximum instantaneous forward voltage at 3.0A	$T_A = 25^\circ C$ $T_A = 70^\circ C$	V_F	1.0 0.95	V
*Maximum DC reverse current at rated DC blocking voltage	$T_A = 25^\circ C$ $T_A = 175^\circ C$	I_R	5.0 300 200	μA
Typical junction capacitance at 4.0V, 1MHz		C_J	40	pF

Note: (1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, with both leads attached between heatsinks
 *JEDEC registered values

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

Fig. 1 – Forward Current Derating Curve

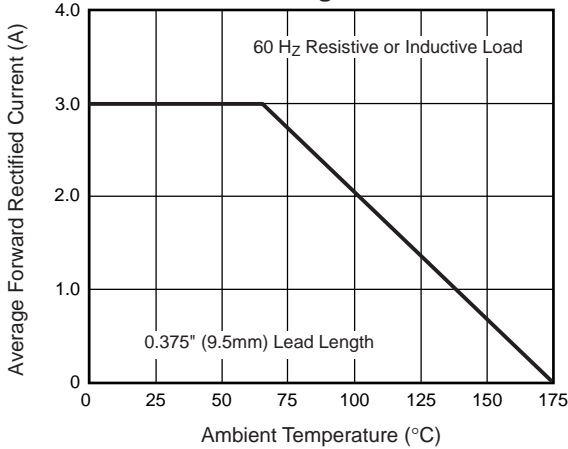


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

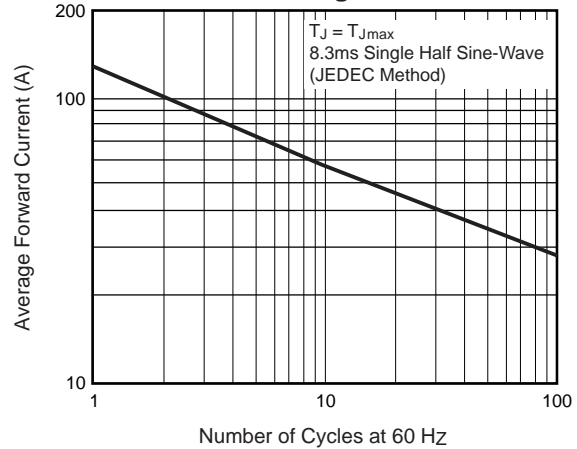


Fig. 3 – Typical Instantaneous Forward Characteristics

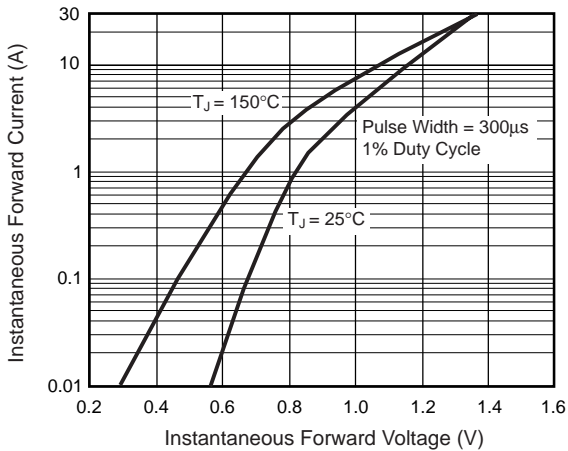


Fig. 4 – Typical Reverse Characteristics

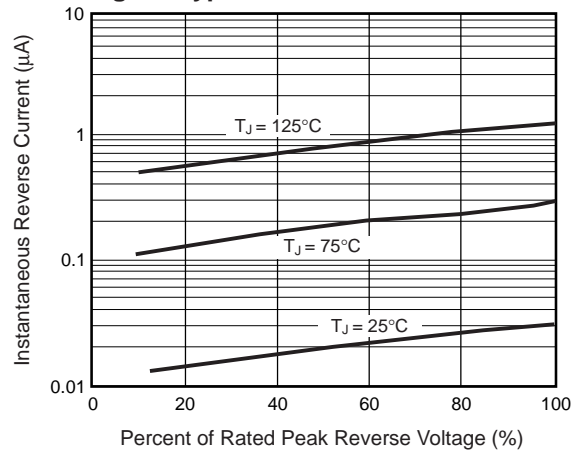


Fig. 5 – Typical Junction Capacitance

