

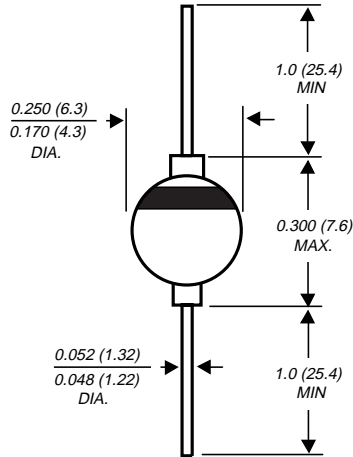
# 1N5624 THRU 1N5627

## GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 200 to 800 Volts Forward Current - 3.0 Amperes

**PATENTED \***

### CASE STYLE G3

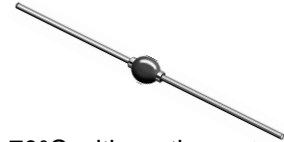


Dimensions in inches and (millimeters)

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

### FEATURES

- ◆ Glass passivated cavity-free junction
- ◆ High temperature metallurgically bonded constructed
- ◆ 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 ounce, 1.1 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	1N5624	1N5625	1N5626	1N5627	UNITS
*Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	Volts
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	Volts
*Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	Volts
*Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=70^\circ C$	$I_{(AV)}$	3.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	125.0				Amps
*Maximum instantaneous forward voltage at 3.0A $T_A=25^\circ C$ $T_A=70^\circ C$	$V_F$	1.0 0.95				Volts
*Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=175^\circ C$	$I_R$	300.0		200.0		$\mu A$
*Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead length at $T_A=70^\circ C$	$I_{R(AV)}$	150.0		100.0		$\mu A$
Typical junction capacitance (NOTE 1)	$C_J$	40.0				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	20.0 10.0				$^\circ C/W$
*Operating junction temperature range	$T_J$	-65 to +175				$^\circ C$
*Storage temperature range	$T_{STG}$	-65 to +200				$^\circ C$

### NOTES:

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
  - (2) 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 1N5624 THRU 1N5627

FIG. 1 - FORWARD CURRENT DERATING CURVE

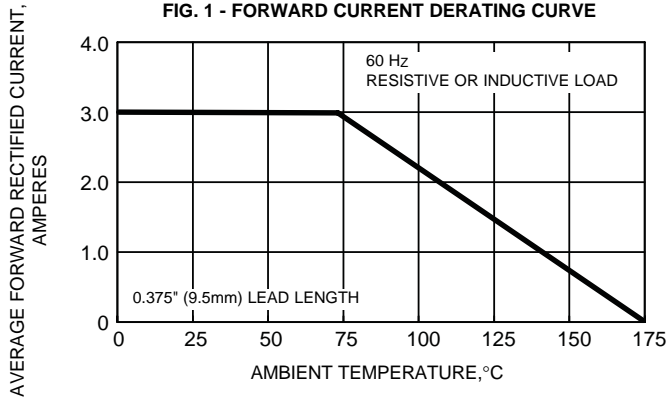


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

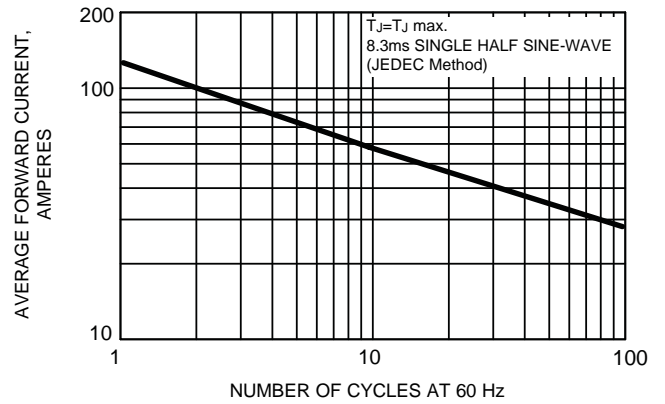


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

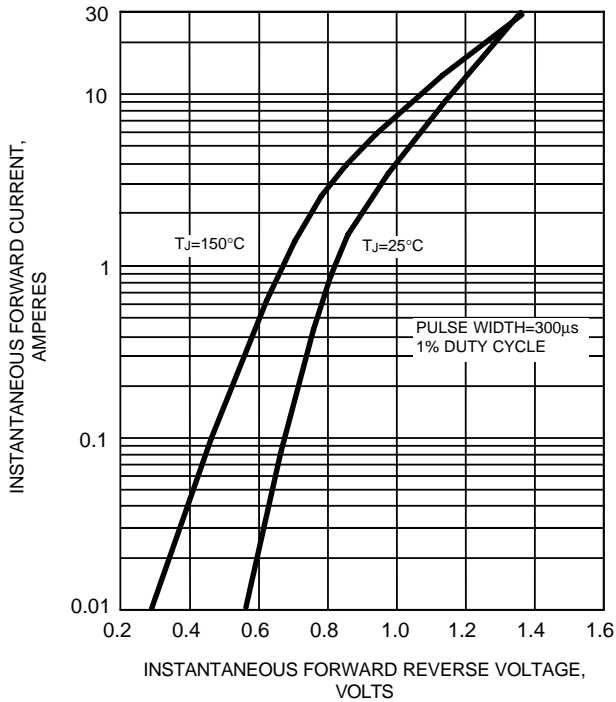


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

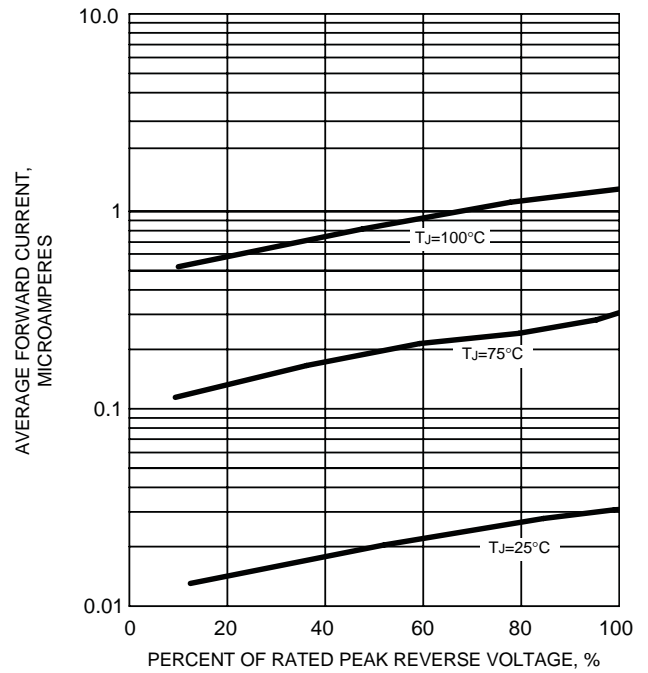


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

