

Silicon Diode

1N5627

800V / 3A

DATASHEET

OEM – General Semiconductor

Source: General Semiconductor Databook 1998

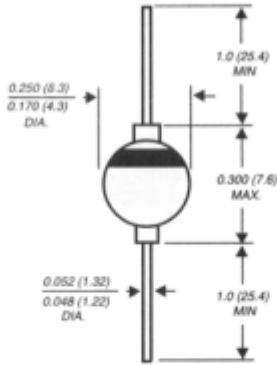
1N5624 THRU 1N5627

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		μA
*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		μA
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

