

Silicon Diode

1N5625

400V / 3A

DATASHEET

OEM – General Semiconductor

Source: General Semiconductor Databook 1998

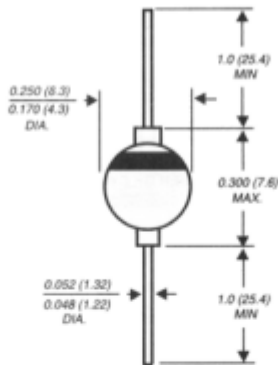
1N5624 THRU 1N5627

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

