

Silicon Diode

1N5625GP

400V / 3A

DATASHEET

OEM – General Semiconductor

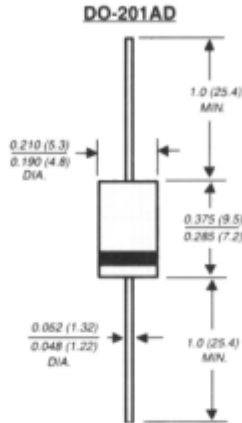
Source: General Semiconductor Databook 1998

1N5624GP THRU 1N5627GP

GLASS PASSIVATED JUNCTION RECTIFIER

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

PATENTED *



Dimensions in inches and (millimeters)

* Glass-plastic encapsulation technique is covered by Patent No. 3,996,602 and brazed-lead assembly by Patent No. 3,930,306



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- 3.0 Ampere operation at $T_A=70^\circ\text{C}$ with no thermal runaway
- Typical I_R less than $0.1\mu\text{A}$
- High temperature soldering guaranteed: $350^\circ\text{C}/10$ seconds, $0.375"$ (9.5mm) lead length 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic over glass body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.04 ounce, 1.12 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	1N5624GP	1N5625GP	1N5626GP	1N5627GP	UNITS
* Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	Volts
* Maximum DC blocking voltage	V_{DC}	200	400	600	800	Volts
* Maximum average forward rectified current 0.375" (9.5mm) lead lengths at $T_A=70^\circ\text{C}$	$I_{(AV)}$	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 $T_A=25^\circ\text{C}$ $T_A=70^\circ\text{C}$	V_F	1.0 0.95				Volts
Maximum reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=150^\circ\text{C}$	I_R	300.0		200.0		μA
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead length at $T_A=70^\circ\text{C}$	$I_{R(AV)}$	200.0				μA
Typical reverse recovery time (NOTE 1)	t_{rr}	3.0				μs
Typical junction capacitance (NOTE 2)	C_J	40.0				pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	20.0				$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175				$^\circ\text{C}$

NOTES:

- (1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_L=0.25\text{A}$
 - (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}
 - (3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted
- *JEDEC Values

RATINGS AND CHARACTERISTIC CURVES 1N5624GP THRU 1N5627GP

