1N5624GP THRU 1N5627GP

GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

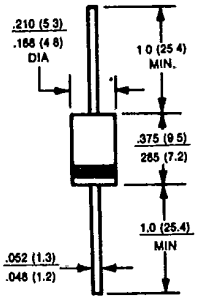
SUPERECTIFIER

GENERAL INSTRUMENT

VOLTAGE RANGE
200 to 800 Volts

CURRENT
3.0 Amperes

DO-201AD



FEATURES

- High temperature metallurgically bonded—no compression contacts as found in diode-constructed rectifiers
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction in DO-201AD package
- 3.0 Ampere operation T_A = 70°C with no thermal runaway
- Typical I_R less than 1 μA
- Exceeds environmental standards of MIL-STD-19500
- High temperature soldering guaranteed 350°C/10 seconds/.375", (9.5mm) lead lengths 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic over glass
Terminals: Axial leads, solderable per MIL-STD-202, Method 208
Polarity: Band denotes cathode
Mounting Position: Any
Weight: 0.04 ounce, 1.12 grams

PATENTED

Brazed lead assembly is covered by Patent No. 3,930,306 of 1976 and glass composition by Patent No. 3,752,701 of 1973

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

	1N5624GP	1N5625GP	1N5626GP	1N5627GP	UNITS
* Maximum Recurent Peak Reverse Voltage	200	400	600	800	V
* Maximum DC Reverse Voltage	200	400	600	800	V
* Maximum Average Forward Rectified Current .375", (9.5mm) lead length at T_A = 70°C	3.0				A
* Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	125				A
* Maximum Instantaneous Forward Voltage at 3A T_A = 25°C	1.0				V
T_A = 70°C	.95				
Maximum Reverse Current at Rated DC * T_A = 25°C	5.0				μA
Reverse Voltage T_A = 150°C	300		200		
Maximum Full Load Reverse Current, Full Cycle Average, .375" (9.5mm) Lead Lenth T_A = 70°C	200				μA
Typical Junction Capacitance (Note 1)	60				pF
Typical Reverse Recovery Time (Note 1)	3				μs
Operating and Storage Temperature Range, T_J, T_{STG}	-65 to +175				°C

NOTES:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A
* JEDEC Registered Value

RATING AND CHARACTERISTIC CURVES 1N5624GP THRU 1N5627GP

FIG. 1 — FORWARD CURRENT DERATING CURVE

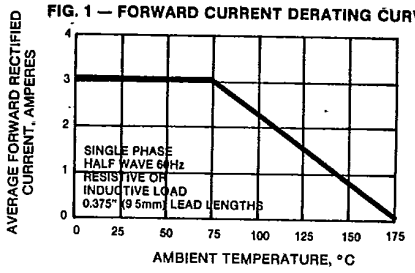


FIG. 2 — MAXIMUM NON-REPETITIVE PEAK SURGE CURRENT

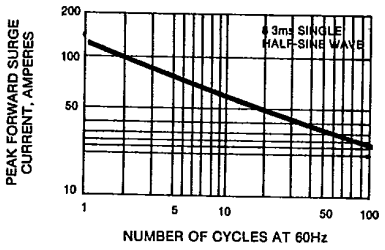


FIG. 3 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

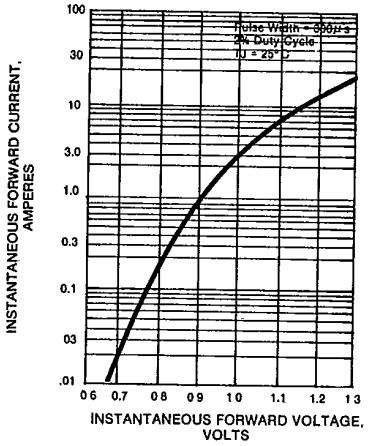


FIG. 4 — TYPICAL JUNCTION CAPACITANCE

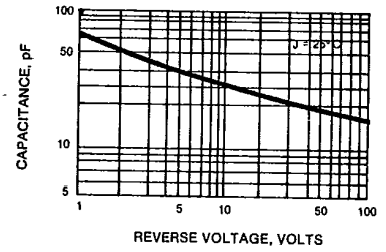


FIG. 5 — TYPICAL REVERSE CHARACTERISTICS

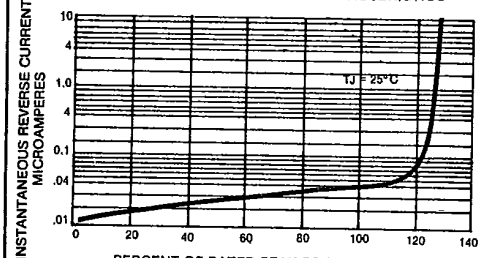


FIG. 6 — SUPERECTIFIER