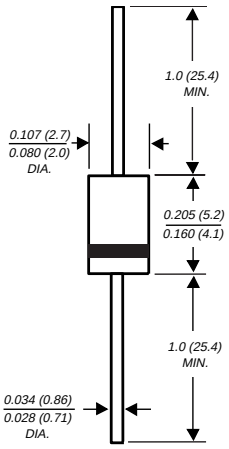
1N3611GP THRU 1N3614GP AND 1N3957GP

GLASS PASSIVATED JUNCTION RECTIFIER

***Reverse Voltage** - 200 to 1000 Volts* ***Forward Current** - 1.0 Ampere*

PATENTED*

DO-204AL



NOTE: Lead diameter is 0.026 (0.66) / 0.023 (0.58) for suffix "E" part numbers

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*

SUPERECTIFIER®

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Capable of meeting environmental standards of MIL-S-19500
- Glass passivated cavity-free junction
- 1.0 Ampere operation at T_A=75°C with no thermal runaway
- Typical I_R less than 0.1µA
- High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-204AL 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: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	*1N 3611GP*	*1N 3612GP*	*1N 3613GP*	*1N 3614GP*	*1N 3957GP*	*UNITS*
* Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	Volts
* Maximum RMS voltage	V_{RMS}	140	280	420	560	700	Volts
* Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	Amps
* Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A=75°C	$I_{(AV)}$	1.0					Amps
* Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0					Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.0					Volts
* Maximum DC reverse current at rated DC blocking voltage T_A=25°C / T_A=150°C	I_R	1.0 300.0					µA
Typical reverse recovery time (NOTE 1)	t_{rr}	2.0					µs
Typical junction capacitance (NOTE 2)	C_J	8.0					pF
Typical thermal resistance (NOTE 3)	$R_{\Theta JA}$ $R_{\Theta JL}$	55.0 25.0					°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					°C

NOTES:
(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr} =0.25A
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
(3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted
* JEDEC registered values

GENERAL SEMICONDUCTOR®

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING

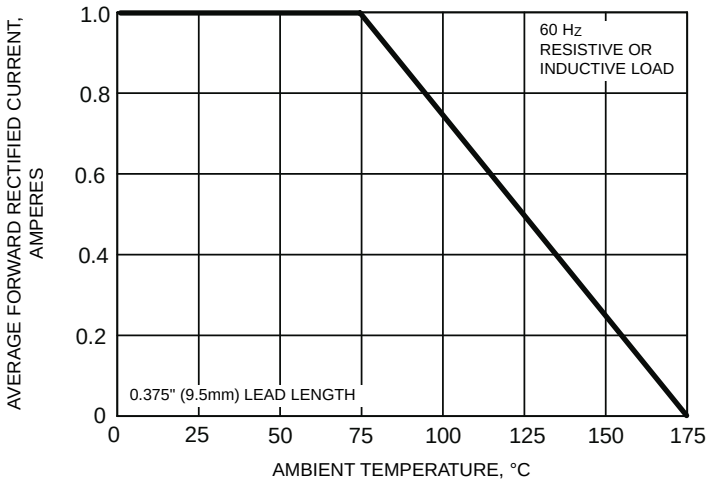


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

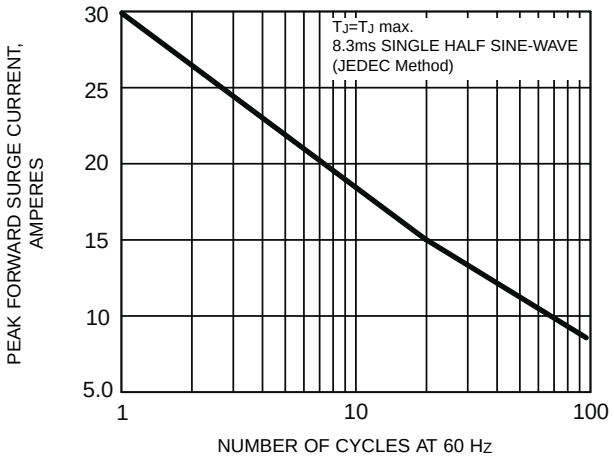


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

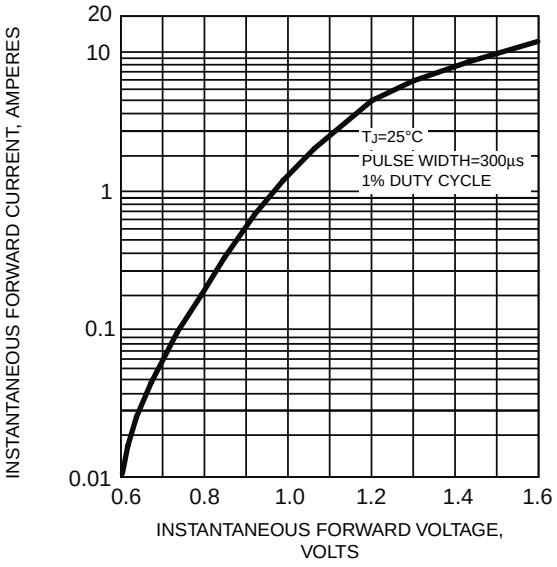


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

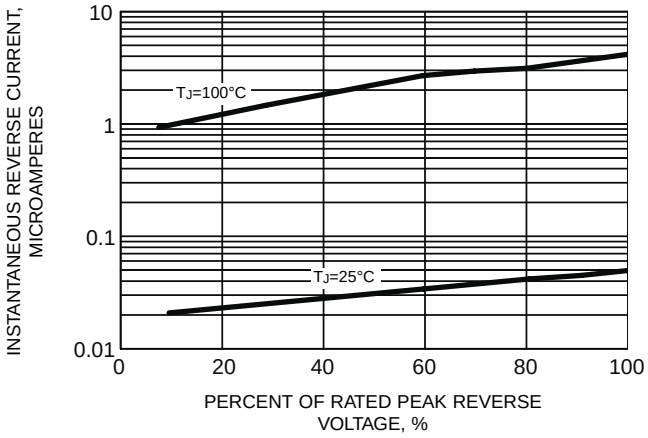


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

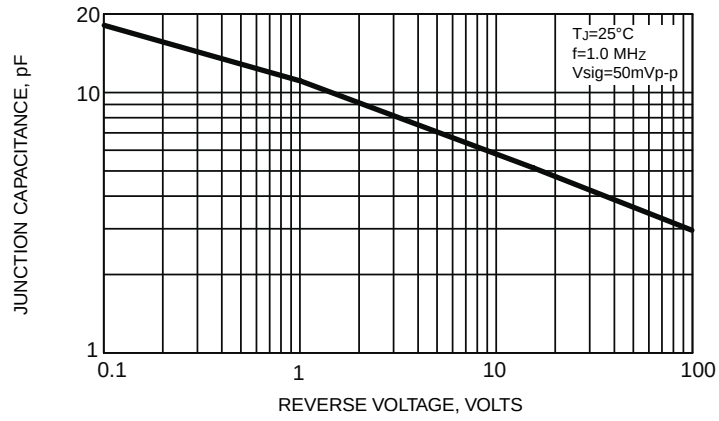
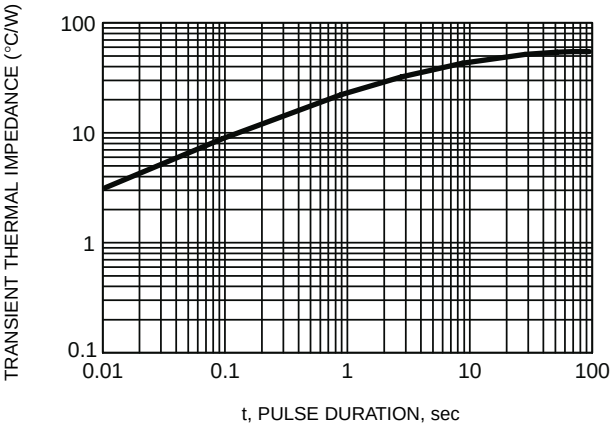


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



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