

**TAYCHIPST****Glass Passivated Junction Rectifier****1N3611GP THRU 1N3614GP, 1N3957GP****200V-1000V 1.0A****FEATURES**

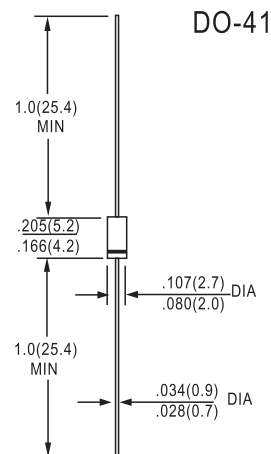
- Superectifier structure for high reliability application
- Cavity-free glass-passivated junction
- Low forward voltage drop
- Low leakage current, I_R less than 0.1 μA
- High forward surge capability
- Meets environmental standard MIL-S-19500
- Solder dip 275 °C max. 10 s, per JESD 22-B106
- AEC-Q101 qualified
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

MECHANICAL DATA

Case: DO-204AL, molded epoxy over glass body
Molding compound meets UL 94 V-0 flammability rating
Base P/N-E3 - RoHS compliant, commercial grade
Base P/NHE3 - RoHS compliant, AEC-Q101 qualified

Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102
E3 suffix meets JESD 201 class 1A whisker test, HE3 suffix meets JESD 201 class 2 whisker test

Polarity: Color band denotes cathode end



Dimensions in inches and (millimeters)

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 $T_A=75^\circ C$	$I_{(AV)}$	1.0					Amps
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
at rated DC blocking voltage $T_A=25^\circ C$ $T_A=150^\circ C$	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					$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					$^\circ C$

NOTES:

(1) Reverse recovery test conditions: $I_F=0.5A$, $I_R=1.0A$, $t_{rr}=0.25A$

(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



RATINGS AND CHARACTERISTIC CURVES 1N3611GP THRU 1N3614GP ,1N3957GP

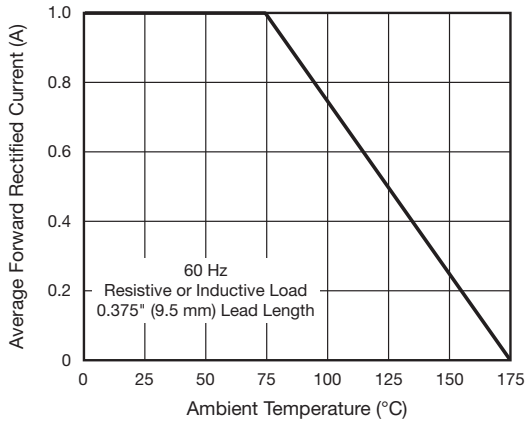


Fig. 1 - Max. Forward Current Derating

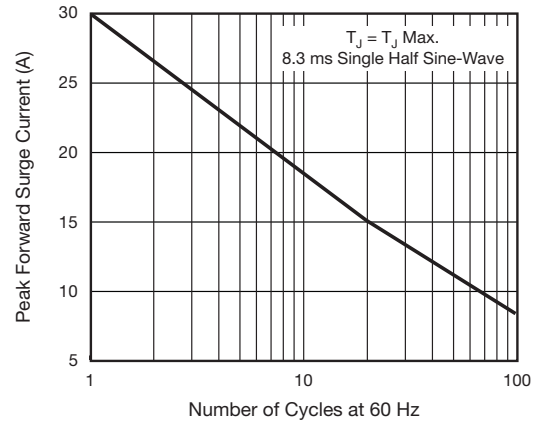


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

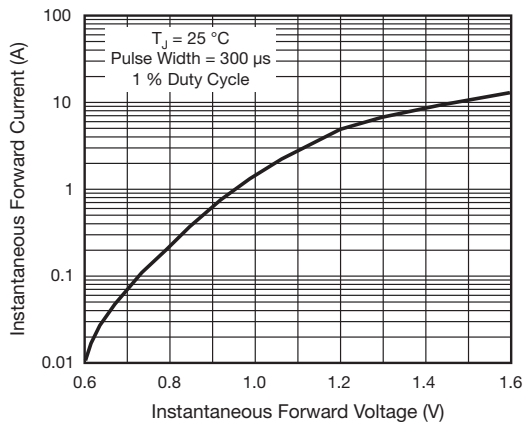


Fig. 3 - Typical Instantaneous Forward Characteristics

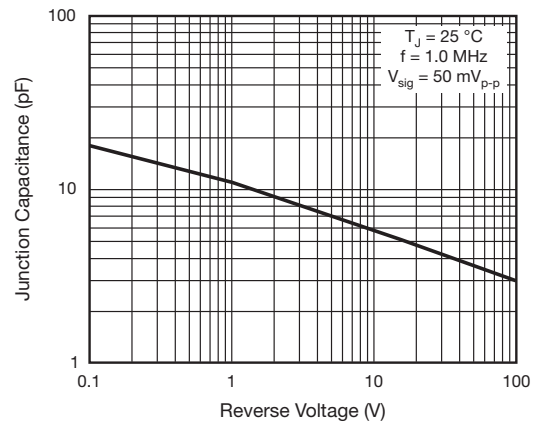


Fig. 5 - Typical Junction Capacitance

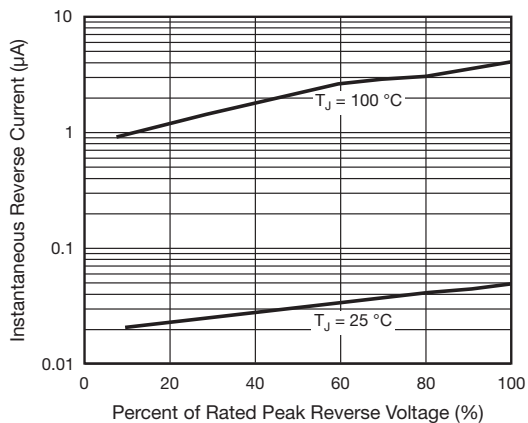


Fig. 4 - Typical Reverse Characteristics

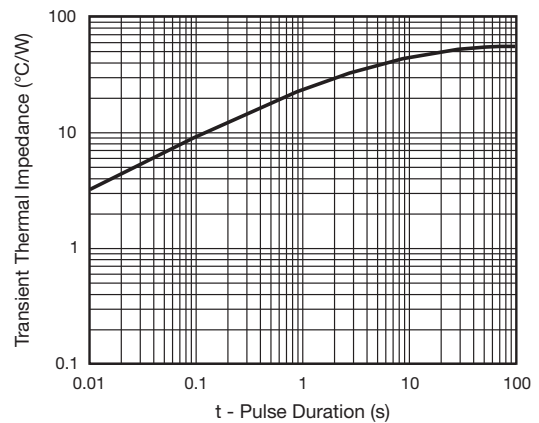


Fig. 6 - Typical Transient Thermal Impedance