1N4933GP THRU 1N4937GP

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER
VOLTAGE:50 TO 600V CURRENT: 1.0A

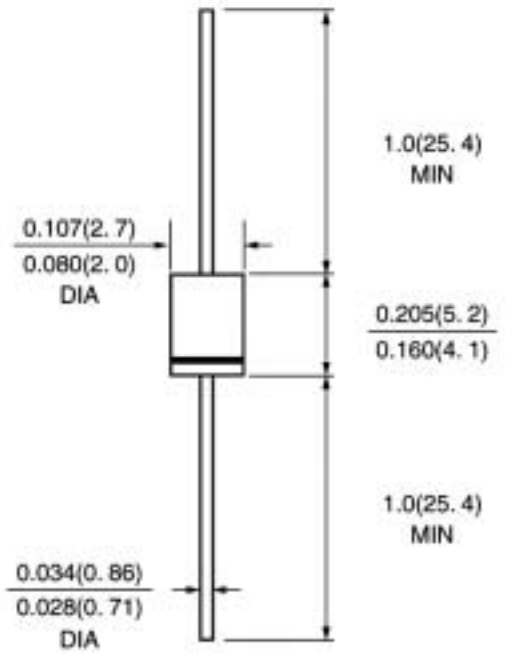
FEATURE

High temperature metallurgic ally bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed 350°C/10sec/0.375"lead length at 5 lbs tension
Operate at Ta =75°C with no thermal run away
Typical Ir<0.1μA

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO-41\DO-204AL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	1N4933 GP	1N4934 GP	1N4935 GP	1N4936 GP	1N4937 GP	units
* Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	V
* Maximum RMS Voltage	Vrms	35	70	140	280	420	V
* Maximum DC blocking Voltage	Vdc	50	100	200	400	600	V
* Maximum Average Forward Rectified Current 3/8"lead length at Ta =75°C	If(av)	1.0					A
* Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	30.0					A
* Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.2					V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 100					μA μA
* Maximum Reverse Recovery Time (Note 1)	Trr	200.0					nS
Typical Junction Capacitance (Note 2)	Cj	15.0					pF
Typical Thermal Resistance (Note 3)	R(ja)	55.0					°C /W
* Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175					°C

Note:
1. Reverse Recovery Condition If =1.0A, Vr =30V
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

* JEDEC registered value

[1]

FIG. 1 - FORWARD CURRENT DERATING CURVE

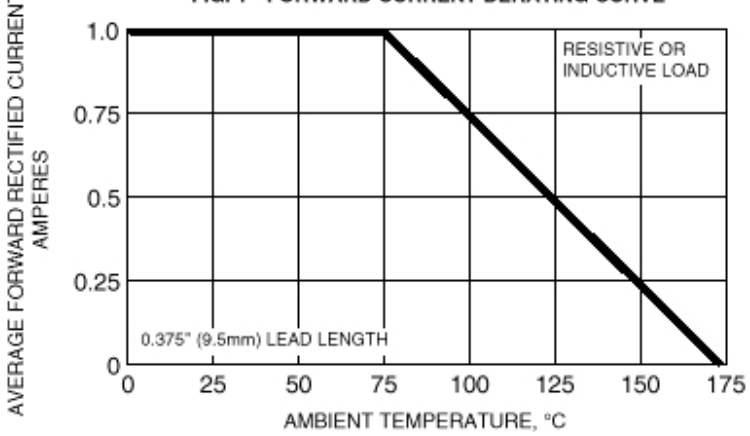


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

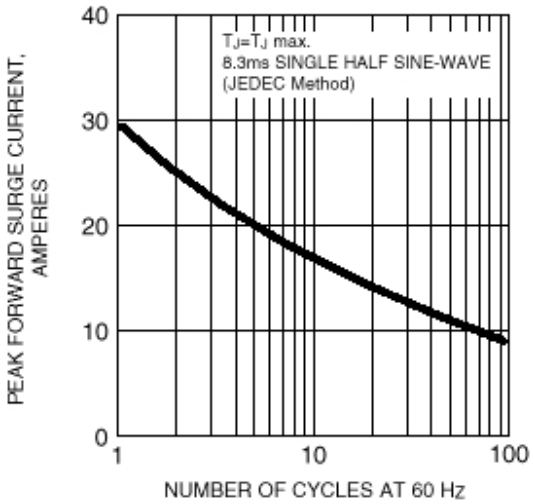


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

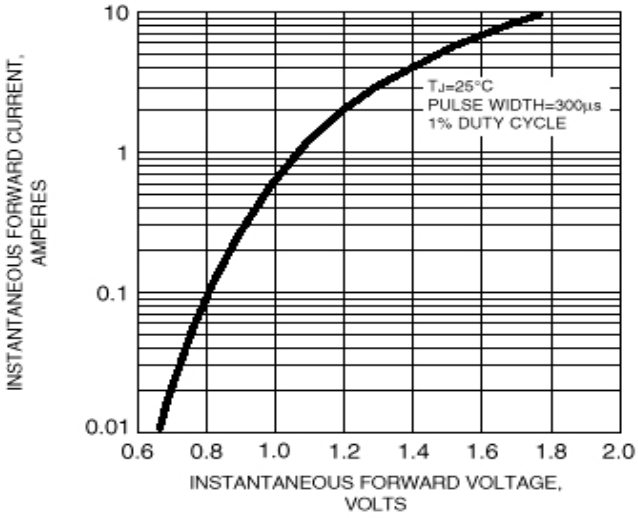


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

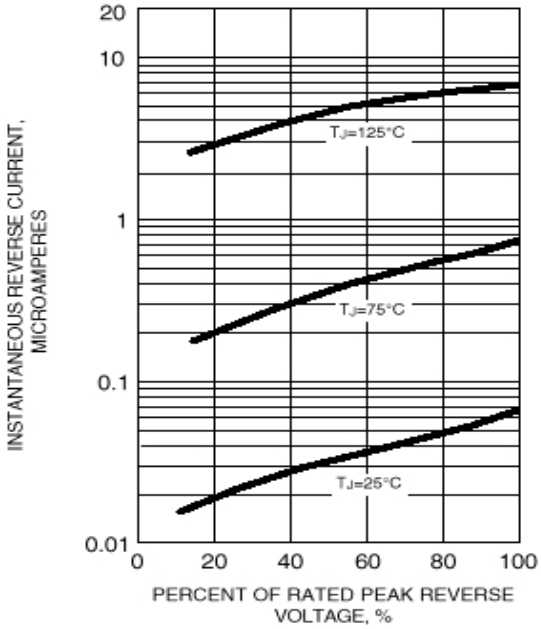


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

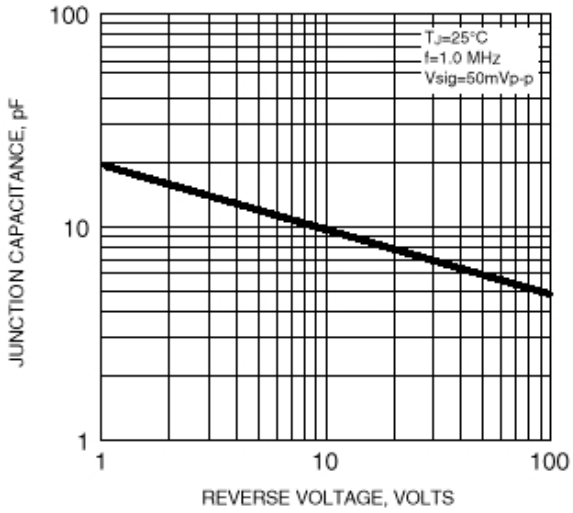
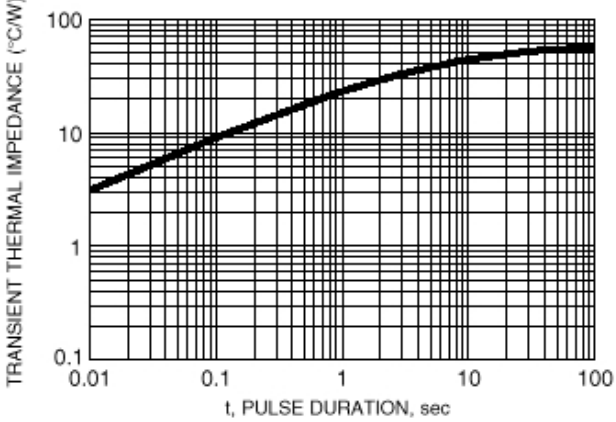


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



[1] Rev.A4, 1-Jul-03