

1N5391GP THRU 1N5399GP

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V

CURRENT: 1.5A

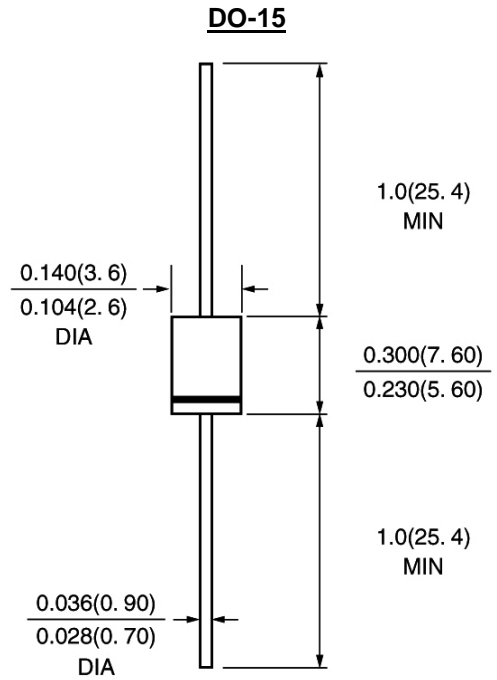


FEATURE

High temperature metallurgically 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 =55°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



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, for capacitive load, derate current by 20%)

	SYMBOL	1N5391 GP	1N5392 GP	1N5393 GP	1N5394 GP	1N5395 GP	1N5396 GP	1N5397 GP	1N5398 GP	1N5399 GP	units
* Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	300	400	500	600	800	1000	v
* Maximum RMS Voltage	V _{rms}	35	70	140	210	280	350	420	560	700	v
* Maximum DC blocking Voltage	V _{dc}	50	100	200	300	400	500	600	800	1000	v
* Maximum Average Forward Rectified Current 3/8"lead length at Ta =60°C	I _{f(av)}	1.5									A
* Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	50.0									A
* Maximum Instantaneous Forward Voltage at 1.5A	V _f	1.4									v
* Maximum full load reverse current full cycle Average at 70°C	I _{r(av)}	300.0									μA
* Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	I _r	5.0 300.0									μA μA
Typical Reverse Recovery Time (Note 1)	T _{rr}	2.0									μS
Typical Junction Capacitance (Note 2)	C _j	15.0									pF
Typical Thermal Resistance (Note 3)	R(ja)	45.0									°C/W
* Storage and Operating Junction Temperature	T _{stg} , T _j	-65 to +175									°C

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
 - Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
 - Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted
- * JEDEC Registered value

RATINGS AND CHARACTERISTIC CURVES 1N5391GP THRU 1N5399GP

FIG. 1 - FORWARD CURRENT DERATING CURVE

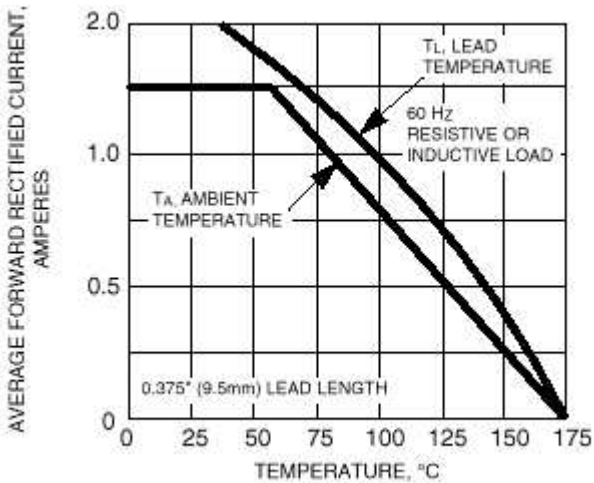


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

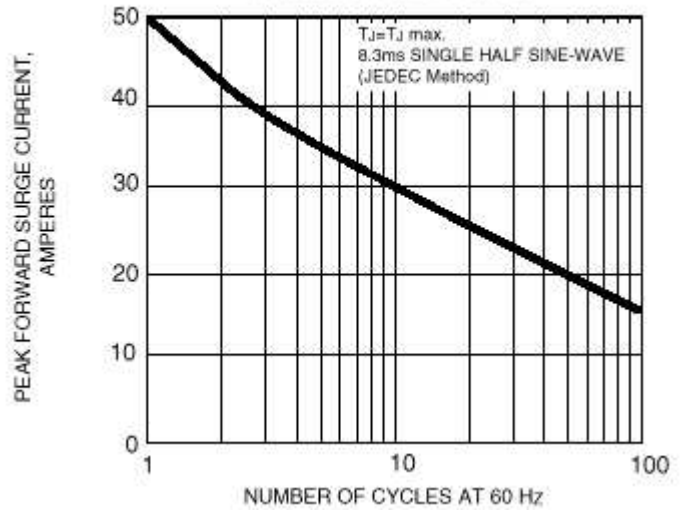


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

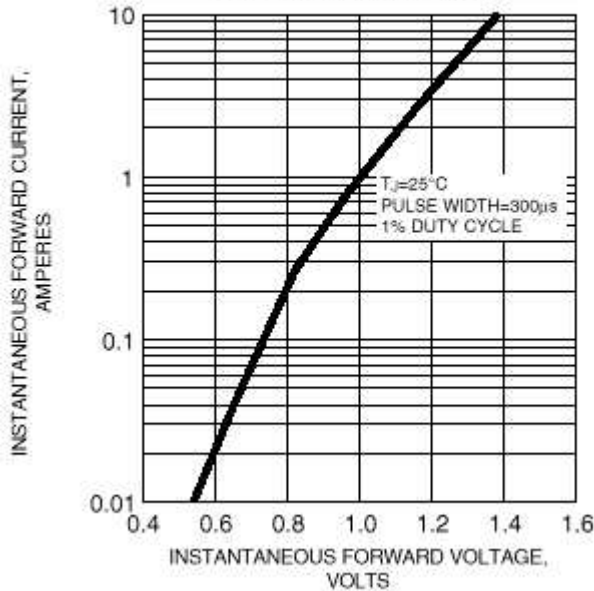


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

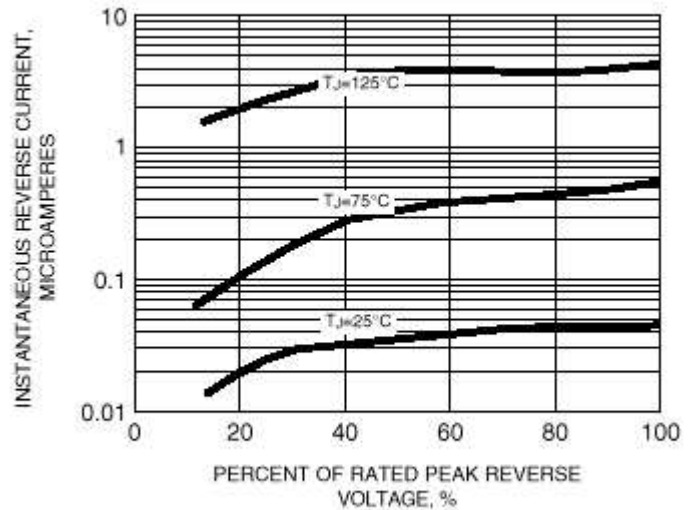


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

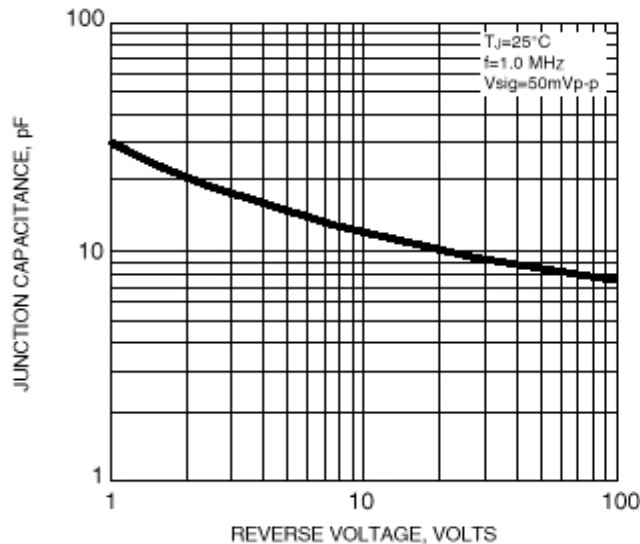


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

