1N5552

SINTERED GLASS JUNCTION RECTIFIER

VOLTAGE: 600V **CURRENT: 4.0A**

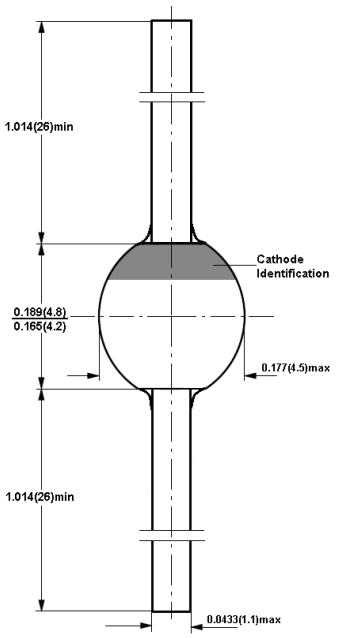
FEATURE

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 J-STD-002
Case: G-4 sintered glass casey
Polarity: color band denotes cathode
Mounting position: any

G4



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	1N5552	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Reverse Breakdown Voltage I_R=50μA	V_{BR}	660	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =55°C	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	100	A
Maximum Instantaneous Forward Voltage at 9.0A	Vf	1.2	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	1.0 100.0	μA
Typical Reverse Recovery Time (Note 1)	Trr	2.0	μS
Typical Junction Capacitance (Note 2)	Cj	40.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	20.0	℃/W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	℃

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
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

RATINGS AND CHARACTERISTIC CURVES 1N5552

FIG. 1 - FORWARD CURRENT DERATING CURVE

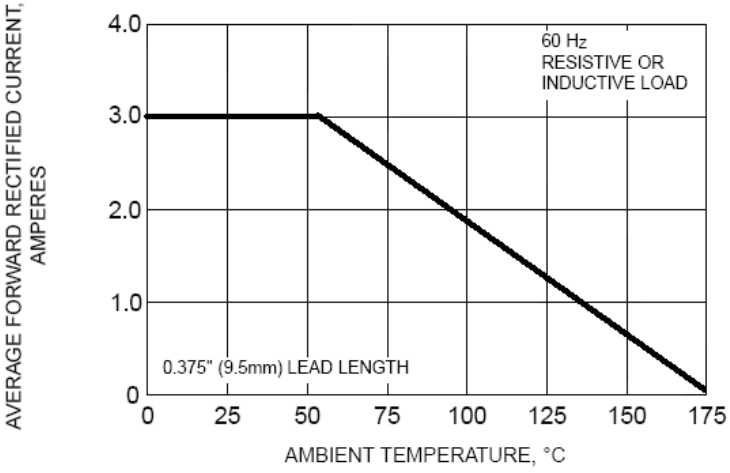


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

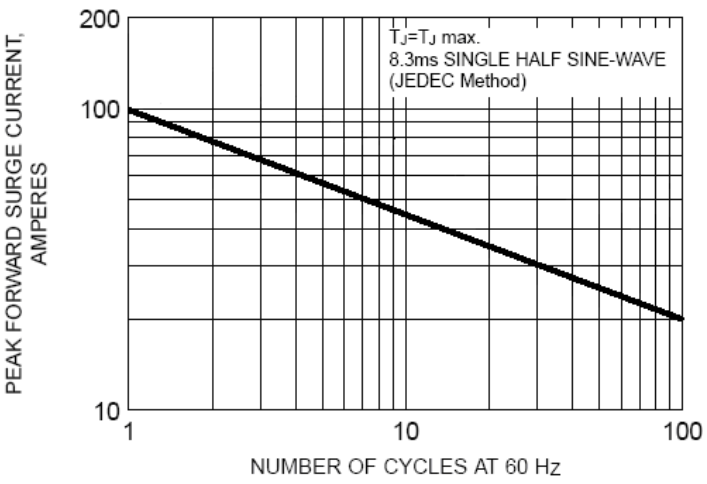


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

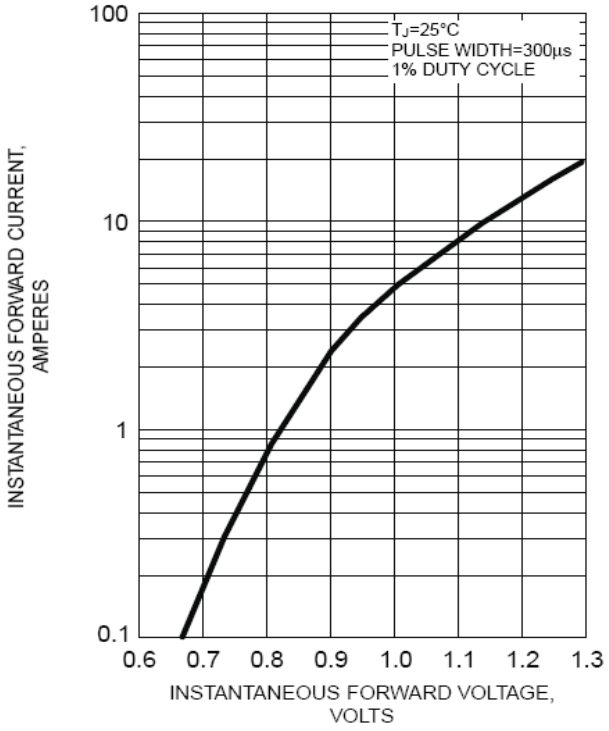


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

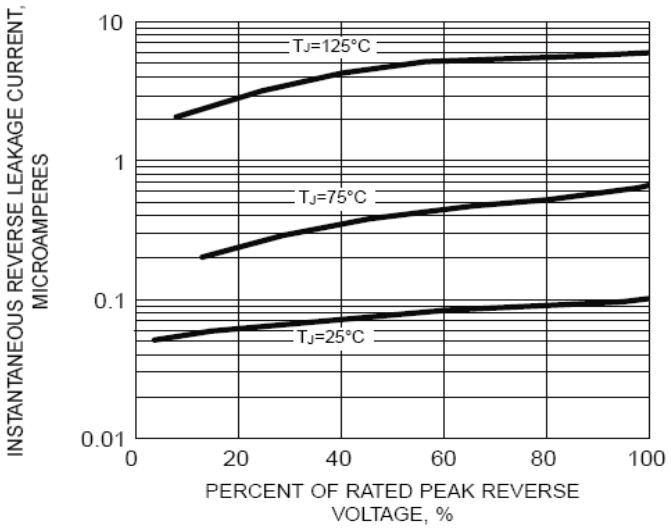


FIG. 5 - TYPICAL JUNCTION CAPACITANCE