GOOD-ARK
SEMICONDUCTOR

1N5554
Sintered Glass General Purpose Rectifier

Features

- High temperature metallurgically bonded construction
- Compliant to environmental standard of MIL-S-19500
- High temperature soldering guaranteed
- 350°C /10sec/0.375”lead length at 5 lbs tension
- High forward surge current capability

Mechanical Data

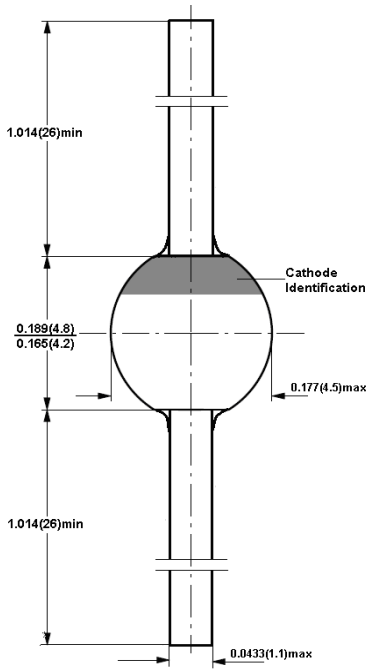
- Terminal: plated axial leads solderable per MIL-STD 202E, method 208C
- Case: G-4 sintered glass case
- Polarity: color band denotes cathode

Marking

- 1N5554

Applications

- General rectifier applications including bridges and half bridges.



Package: G4

All dimensions in inches (millimeters)

Maximum Ratings and Electrical Characteristics

(T_A=25°C unless otherwise specified)

Parameter	Symbol	1N5554	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current 3/8” Lead Length at T_A =55°C	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	100	A
Maximum Instantaneous Forward Voltage at 9.0A	V_F	1.2	V
Maximum Full Load Reverse Current Full Cycle Average at 55°C	$I_{R(AV)}$	100	uA
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A =25°C T_A=150°C	I_R	1.0 100	uA
Typical Reverse Recovery Time (Note 1)	T_{RR}	2.0	uS
Typical Junction Capacitance (Note 2)	C_J	40.0	pF
Typical Thermal Resistance (Note 3)	$R_{TH(JA)}$	20.0	°C/W
Storage and Operating Junction Temperature	T_{STG}, T_J	-65 to +175	°C

Note:
1. Reverse recovery condition I_F=0.5A, I_R =1.0A, I_{RR} =0.25A;
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{DC};
3. Thermal resistance from junction to ambient at 3/8”lead length, P.C. board mounted.

Ratings and Characteristic Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

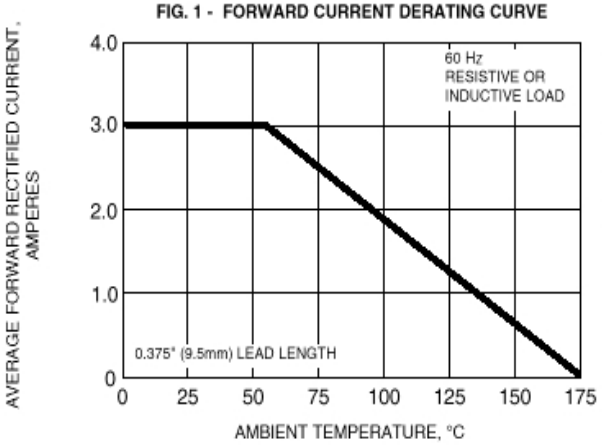


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

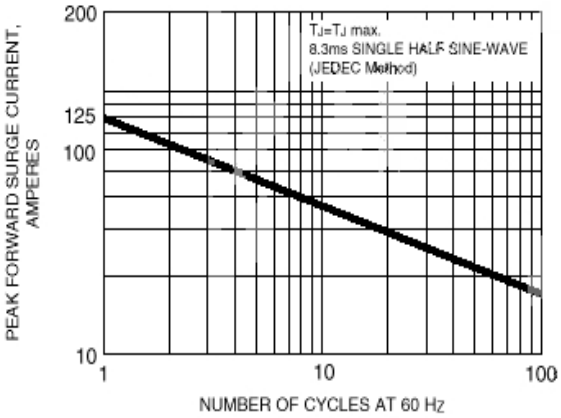


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

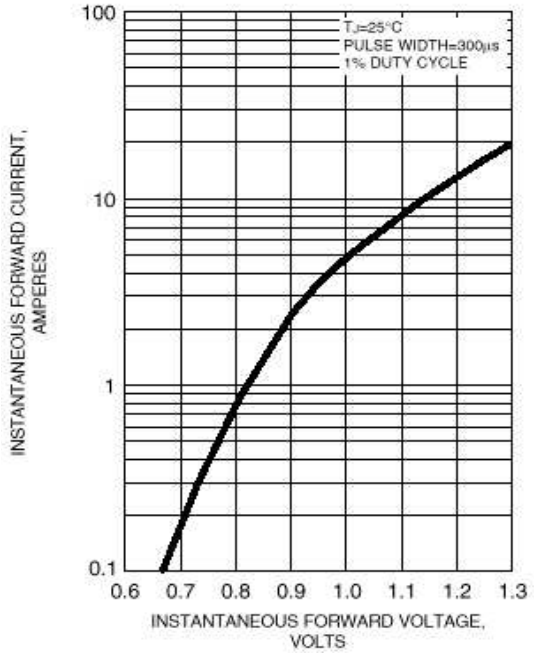


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

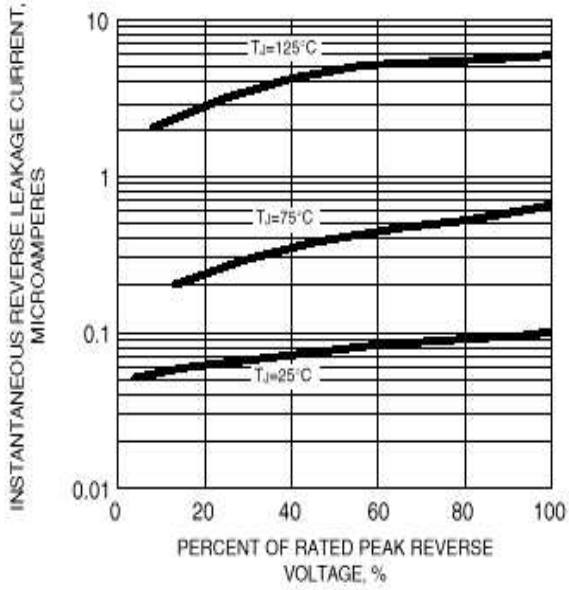


FIG. 5 - TYPICAL JUNCTION CAPACITANCE