

**1N5554**

**SINTERED GLASS JUNCTION  
RECTIFIER**

**VOLTAGE: 1000V**

**CURRENT: 3.0A**

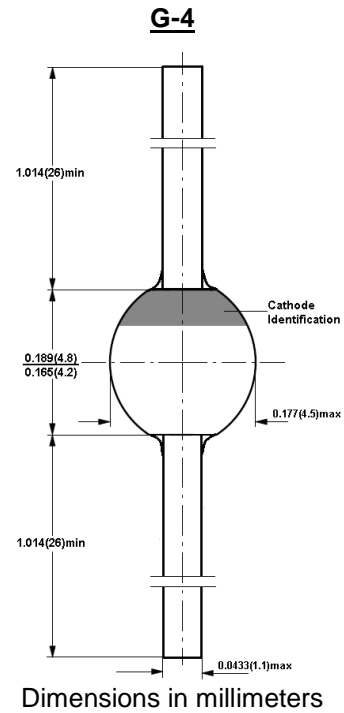


**FEATURE**

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 MIL-STD 202E, method 208C  
Case: G-4 sintered glass case  
Polarity: color band denotes cathode  
Mounting position: any



**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%)

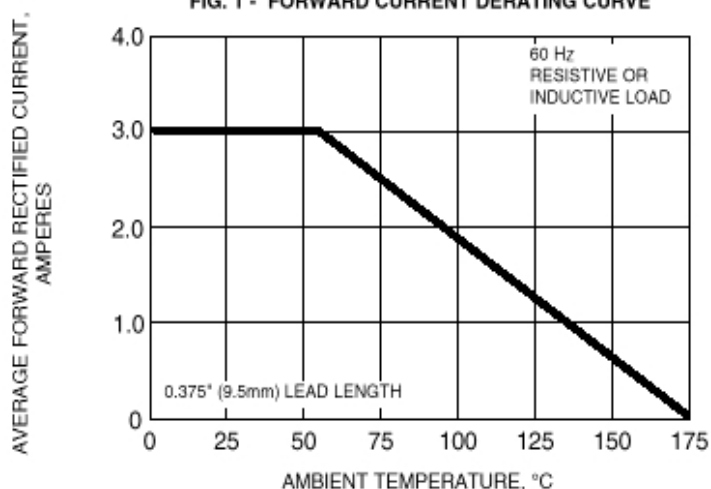
	SYMBOL	1N5554	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I <sub>f(av)</sub>	3.0	A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I <sub>fsm</sub>	80.0	A
Maximum Instantaneous Forward Voltage at 9.0A	V <sub>f</sub>	1.2	V
Maximum Full Load Reverse Current Full Cycle Average at 55°C	I <sub>r(av)</sub>	100.0	μA
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =150°C	I <sub>r</sub>	1.0 100.0	μA
Typical Reverse Recovery Time (Note 1)	T <sub>rr</sub>	2.0	μS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	40.0	pF
Typical Thermal Resistance (Note 3)	R <sub>th(ja)</sub>	20.0	°C /W
Storage and Operating Junction Temperature	T <sub>stg, Tj</sub>	-65 to +175	°C

Note:

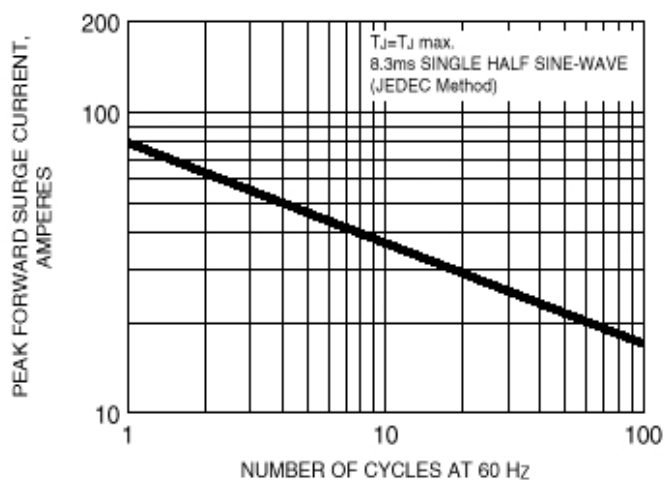
1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

# RATINGS AND CHARACTERISTIC CURVES 1N5554

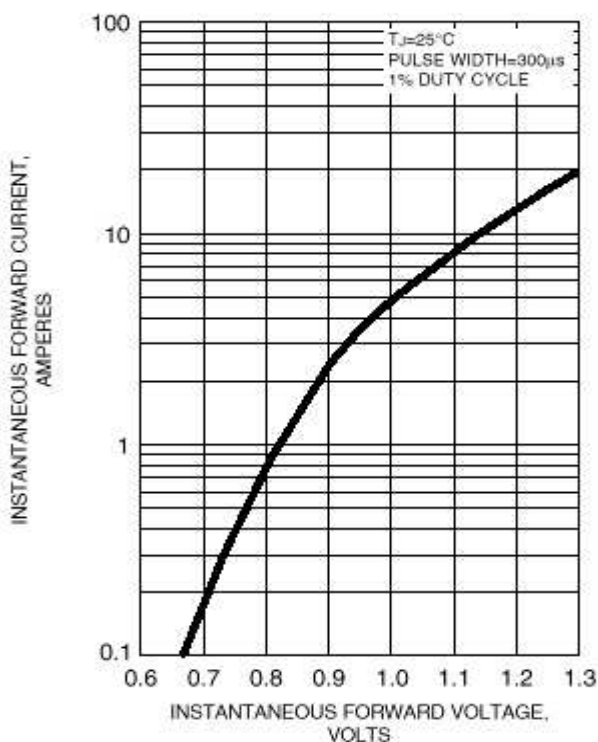
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



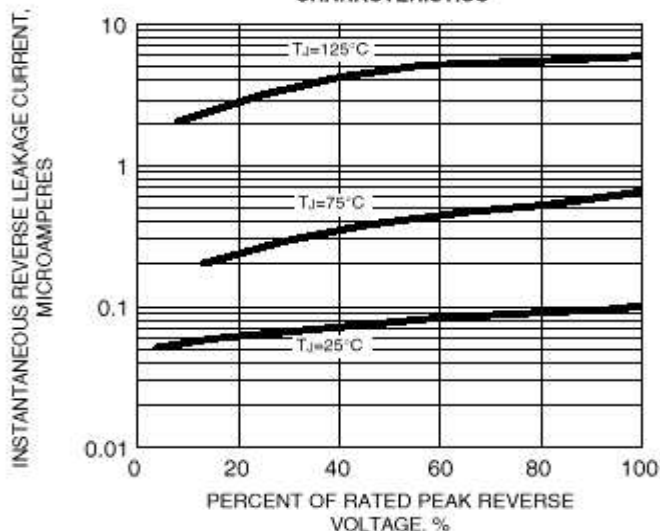
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

