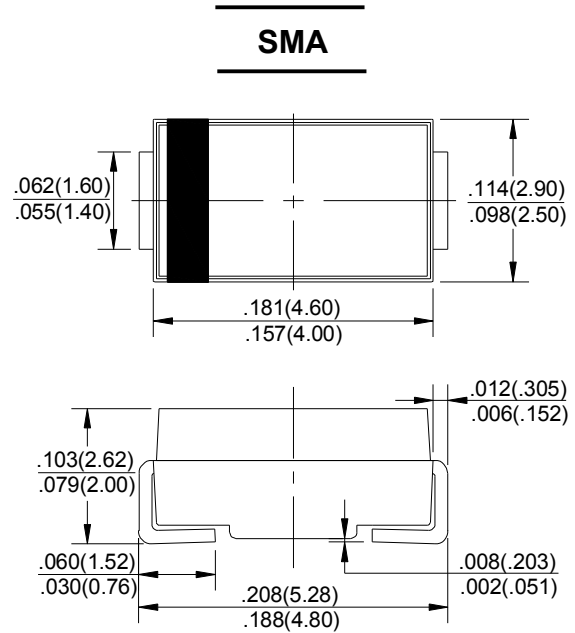


**FEATURES**

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case: Molded Plastic
- Polarity: Indicated by cathode band
- Weight: 0.002 ounces, 0.053 grams
- Mounting position: Any



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	US1A	US1B	US1D	US1G	US1J	US1K	US1M	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @T <sub>L</sub> =110 °C	I <sub(av)< sub=""></sub(av)<>	1.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A	
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.0		1.4		1.7			V	
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>	10				50				µA
Maximum reverse recovery time(Note1)	t <sub>rr</sub>	50				75				ns
Typical Junction Capacitance (Note2)	C <sub>J</sub>	17							pF	
Typical Thermal Resistance (Note3)	R <sub>θJC</sub>	60							°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°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 1.0MHz and applied reverse voltage of 4.0V DC.  
 3. Thermal Resistance Junction to Ambient.

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC

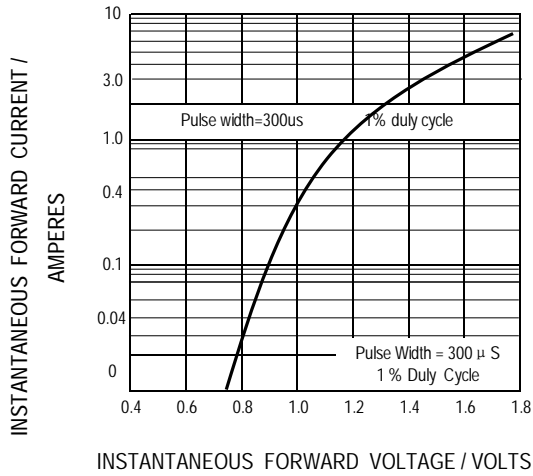


FIG. 2 -- TYPICAL JUNCTION CAPACITANCE

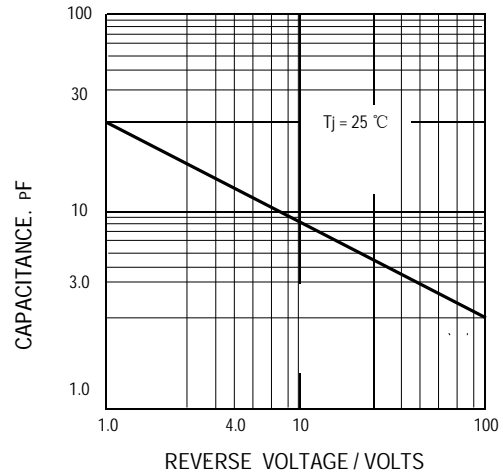


FIG. 3 -- FORWARD CURRENT DERATING CURVE

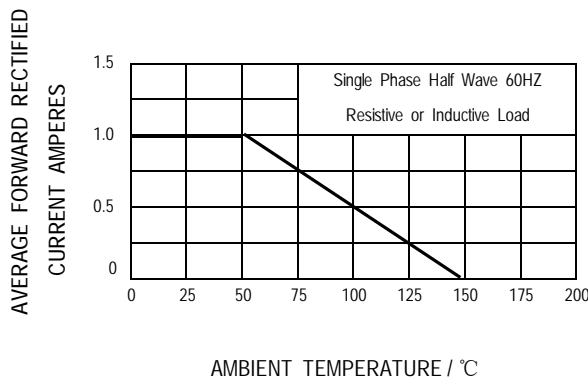


FIG. 4 -- PEAK FORWARD SURGE CURRENT

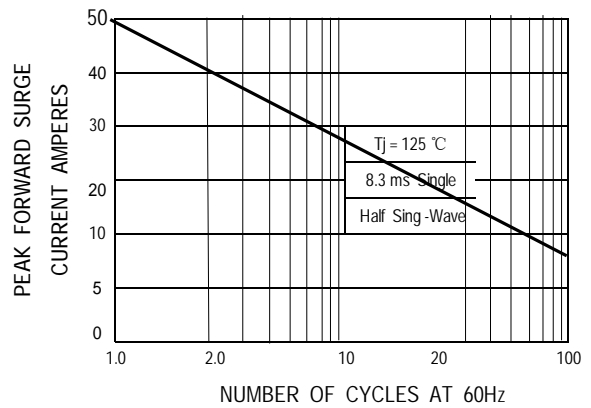
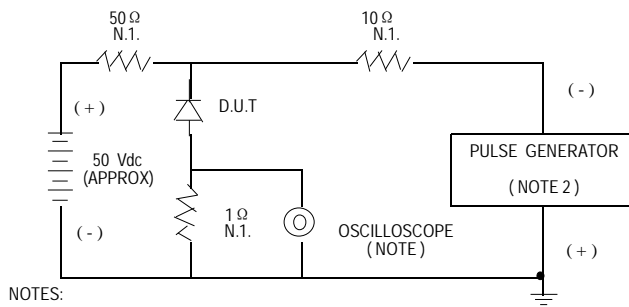
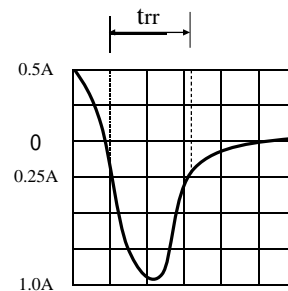


FIG. 5 -- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



- NOTES:
1. RISE TIME = 7n SEC MAX. INPUT IMPEDANCE = 1 MEGOHM. 22PF
  2. RISE TIME = 10n SEC MAX. SOURCE IMPEDANCE = 50 OHM.



SET TIME BASE FOR 15 ns/cm