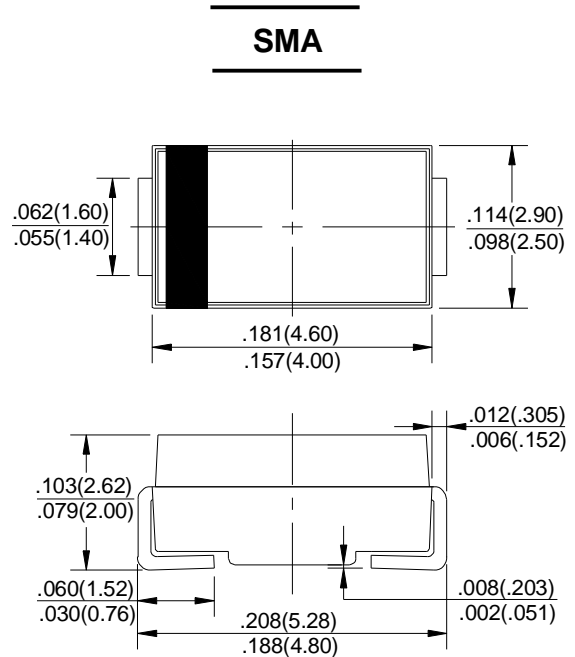


**FEATURES**

- For surface mounted applications
- Metal-Semiconductor junction with guarding
- Epitaxial construction
- Very low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in lowvoltage, high frequency inverters, free wheeling, and polarity protection applications.

**MECHANICAL DATA**

- Case: Molded Plastic
- Polarity: Indicated by cathode band
- Weight: 0.002 ounces, 0.064 grams



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	SS52	SS53	SS54	SS55	SS56	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	V	
Maximum RMS Voltage	VRMS	14	21	28	35	42	V	
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	V	
Maximum Average Forward Rectified Current @TL=100 °C	I(AV)	5.0					A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	IFSM	90					A	
Maximum Forward Voltage at 3.0A DC	VF	0.45	0.55		0.65		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @Tj=25°C @Tj=100°C	IR	1.0					20	mA
Typical Junction Capacitance (Note1)	CJ	250					pF	
Typical Thermal Resistance (Note2)	RθJL	10					°C/W	
Typical Thermal Resistance (Note3)	RθJA	50					°C/W	
Operating Temperature Range	TJ	-55 to + 150					°C	
Storage Temperature Range	TSTG	-55 to + 175					°C	

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

- 2.Thermal resistance junction to lead.
- 3.Thermal resistance junction to ambient.

FIG. 1 - FORWARD CURRENT DERATING CURVE

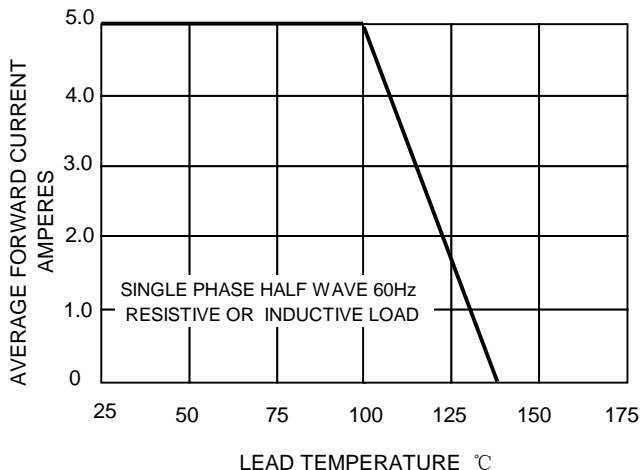


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

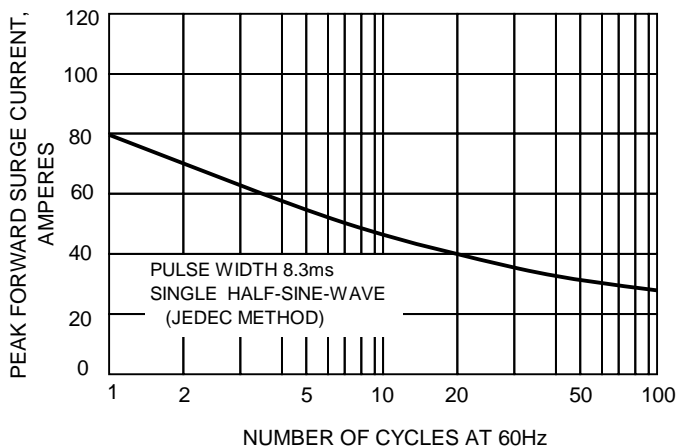


FIG.3-TYPICAL FORWARD CHARACTERISTICS

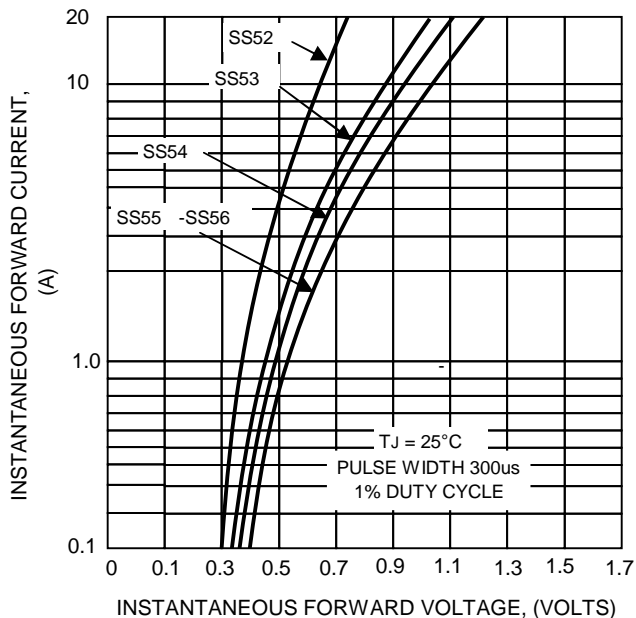


FIG.4-TYPICAL JUNCTION CAPACITANCE

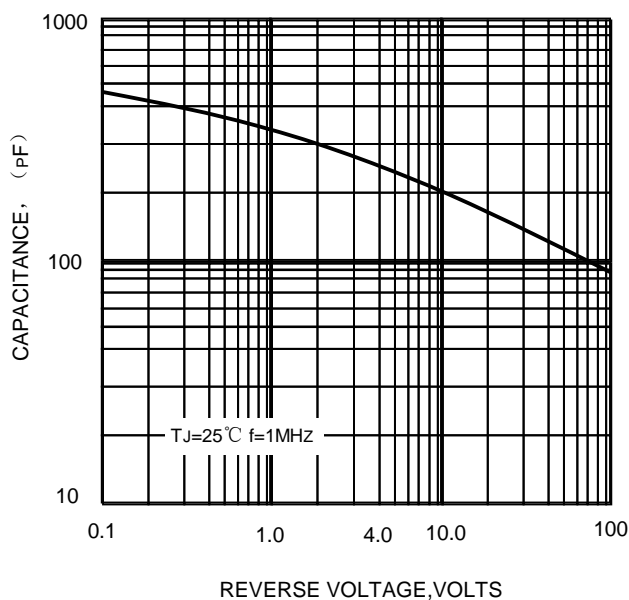


FIG.5-TYPICAL REVERSE CHARACTERISTICS

