

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE - 20 to 100 Volts FORWARD CURRENT - 3.0 Amperes
------------------------------------------------------	----------------------------------------------------------------------------

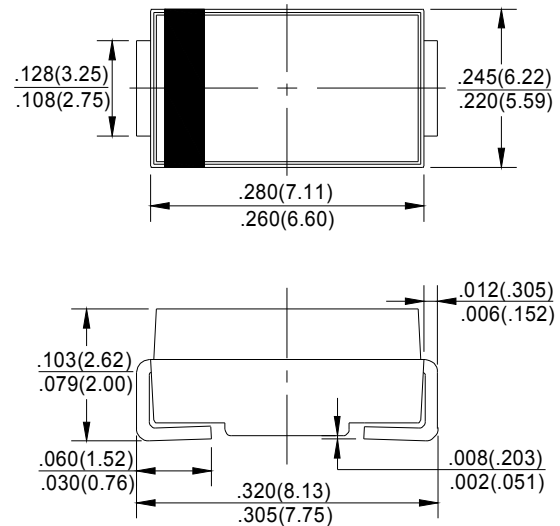
FEATURES

- 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 low voltage, high frequency inverters, free wheeling, and polarity protection applications.

MECHANICAL DATA

- Case: Molded Plastic
- Polarity: Color band denotes cathode
- Weight: 0.007 ounces, 0.21 grams

SMC



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	SS32	SS33	SS34	SS35	SS36	SS38	SS310	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V	
Maximum Average Forward Rectified Current @ _{TL} =100 °C	I _(AV)	3.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I _{FSM}	80							A	
Maximum Forward Voltage at 3.0A DC	V _F	0.55		0.7		0.85		V		
Maximum DC Reverse Current at Rated DC Blocking Voltage @ _{TJ} =25°C @ _{TJ} =100°C	I _R	1.0							20	mA
Typical Junction Capacitance (Note1)	C _J	250							pF	
Typical Thermal Resistance (Note2)	R _{θJL}	10							°C/W	
Typical Thermal Resistance (Note3)	R _{θJA}	50							°C/W	
Operating Temperature Range	T _J	-55 to + 125							°C	
Storage Temperature Range	T _{STG}	-55 to + 150							°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.

RATING AND CHARACTERISTIC CURVES
SS32 thru SS310



FIG. 1 - FORWARD CURRENT DERATING CURVE

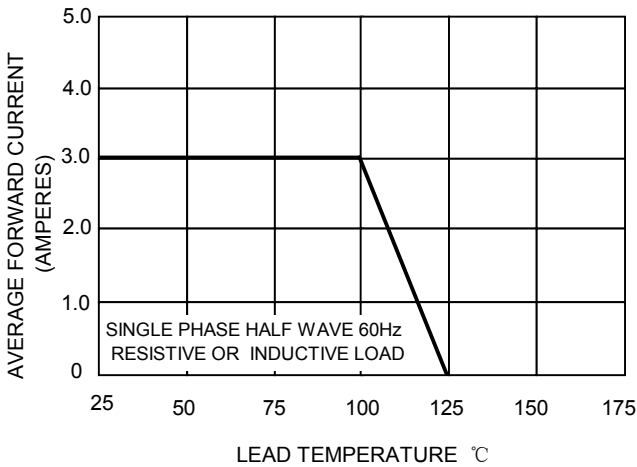


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

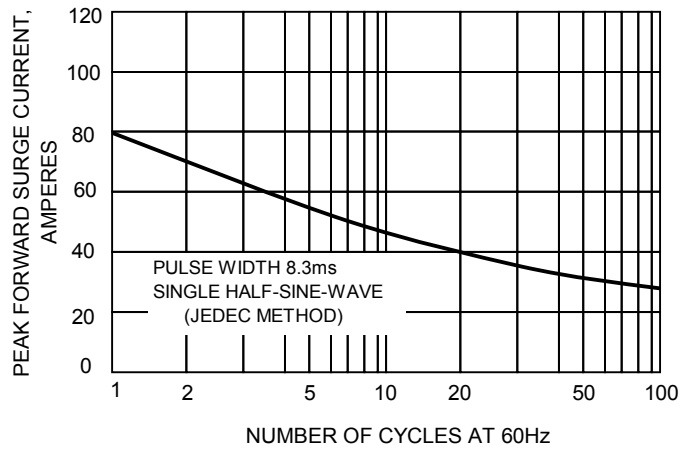


FIG.3-TYPICAL FORWARD CHARACTERISTICS

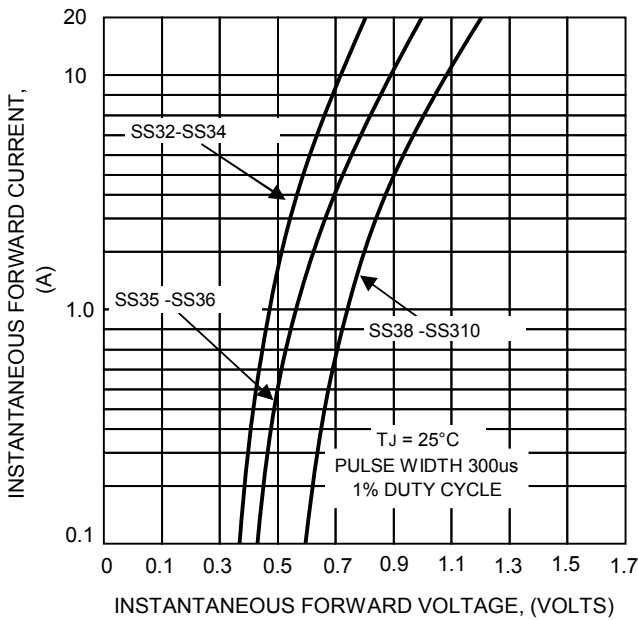


FIG.4-TYPICAL JUNCTION CAPACITANCE

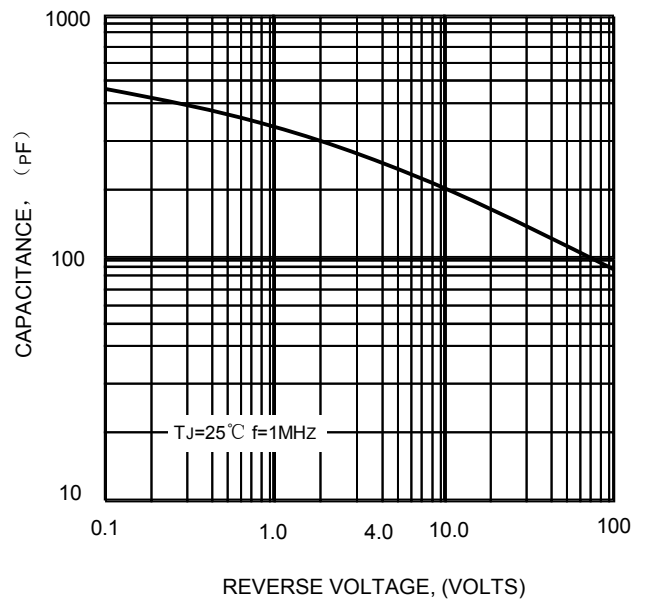


FIG.5-TYPICAL REVERSE CHARACTERISTICS

