

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **20 to 100** Volts

FORWARD CURRENT - **3.0** Amperes

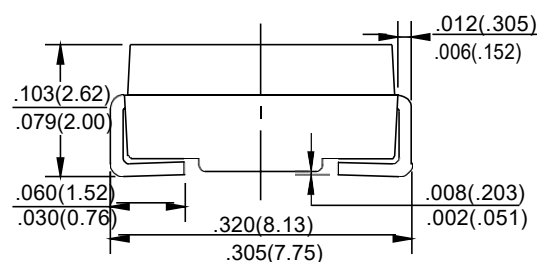
### FEATURES

- 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**



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	CSD32	CSD33	CSD34	CSD35	CSD36	CSD38	CSD310	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @T <sub>L</sub> =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 <sub>FSM</sub>	80							A
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	0.45	0.55	0.6	0.7		0.85		V
Maximum DC Reverse Current @T <sub>J</sub> =25 °C at Rated DC Blocking Voltage @T <sub>J</sub> =100 °C	I <sub>R</sub>	1.0 20							mA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	250							pF
Typical Thermal Resistance (Note2)	R <sub>θJL</sub>	10							°C/W
Typical Thermal Resistance (Note3)	R <sub>θJA</sub>	50							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to + 150							°C
Storage Temperature Range	T <sub>STG</sub>	-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.

FIG. 1 - FORWARD CURRENT DERATING CURVE

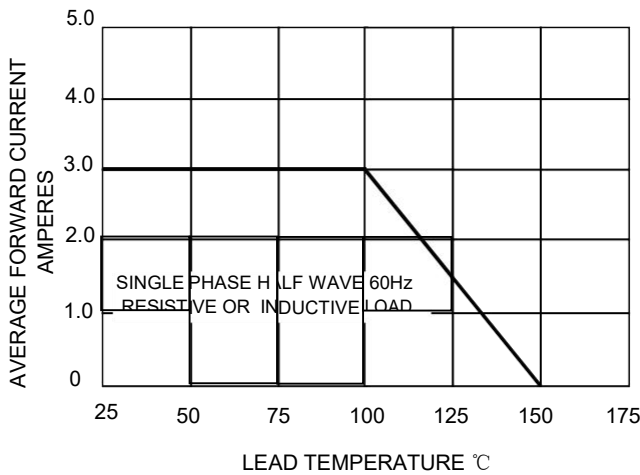


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

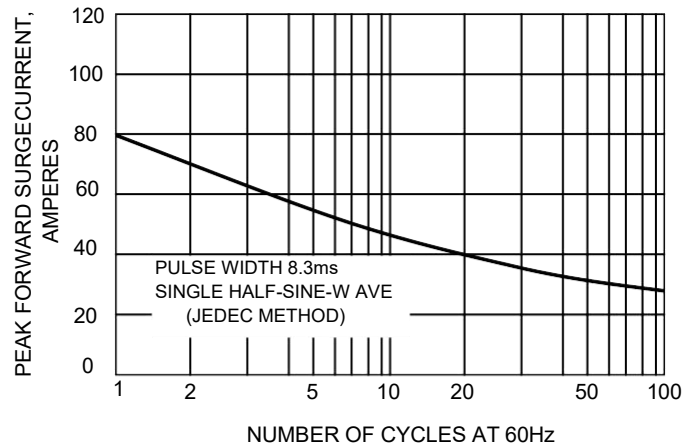


FIG.3-TYPICAL FORWARD CHARACTERISTICS

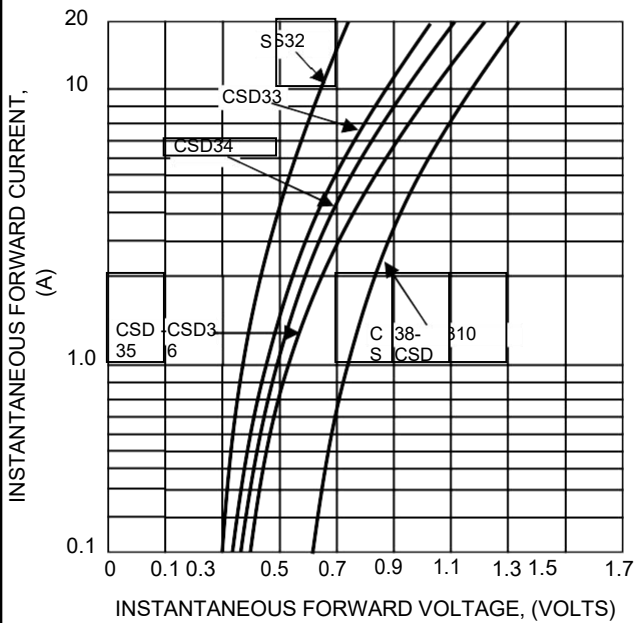


FIG.4-TYPICAL JUNCTION CAPACITANCE

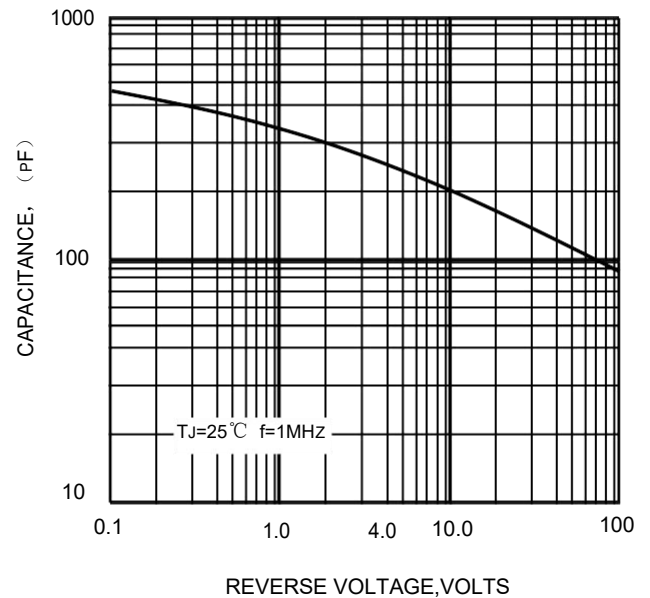
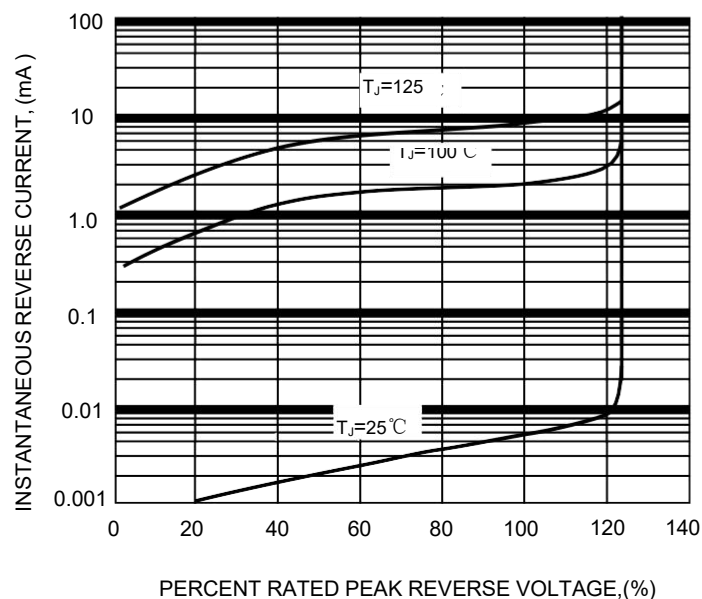


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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