

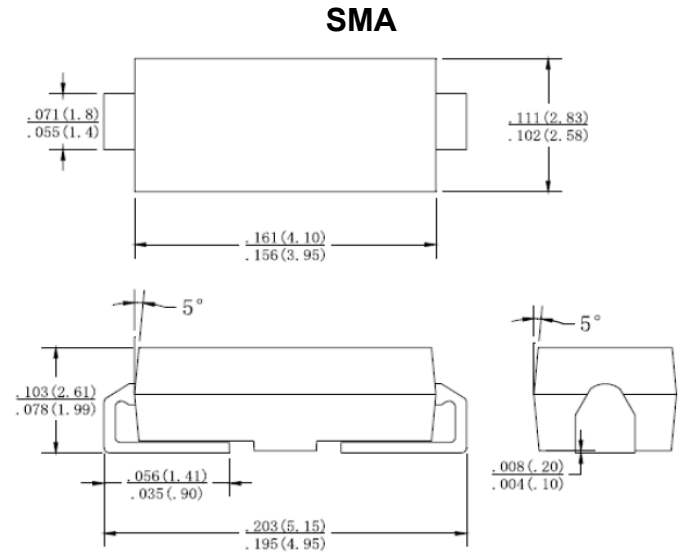
# SS12 THRU SS110

## 1.0AMP.SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage Range 20 to 100 Volts Current 1.0Amperes

### FEATURES

- ◆ For surface mounted application
- ◆ Easy pick and place
- ◆ Metal to silicon rectifier, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability, low VF
- ◆ High surge current capability
- ◆ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ◆ Epitaxial construction
- ◆ High temperature soldering: 260°C / 10 seconds at terminals



Dimensions in inches and (millimeters)

### MECHANICAL DATA

**Case:** molded plastic

**Terminals:** Solder plated

**Polarity :** Indicated by cathode band

**Packaging:** 12mm tape EIA STD RS-481

**Weight:** 0.074gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Type Number		SS12	SS13	SS14	SS15	SS16	SS19	SS110	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	90	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	90	100	V
Maximum Average Forward Rectified Current at T <sub>L</sub> (See Fig. 2)	I <sub>F(AV)</sub>	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	30							A
Maximum Instantaneous Forward Voltage (Note@1.0 A)	V <sub>F</sub>	0.50			0.75		0.80		V
Maximum DC Reverse Current @ TA=25°C	I <sub>R</sub>	0.4			0.4		0.1		mA
At Rated DC Blocking Voltage @ TA=125°C		10.0			5.0		2.0		
Typical Thermal Resistance (Note )	R <sub>QJL</sub>	28							°C/W
	R <sub>QJA</sub>	88							
Operating Junction Temperature Range	T <sub>J</sub>	-65 to +125			-65 to +150				°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150							°C

**NOTE:** Measured on P.C. Board with 0.2" x 0.2" (5.0mm x 5.0mm) Copper Pad Areas

# SS12 THRU SS110

## RATING AND CHARACTERISTIC CURVES SS12 THRU SS110

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT

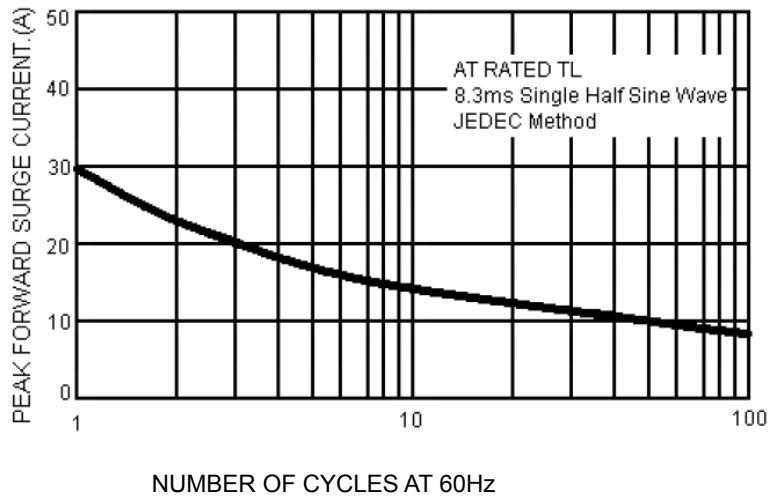


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

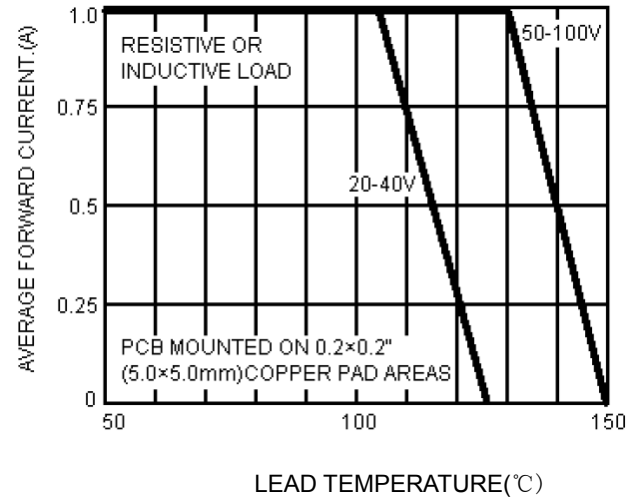


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

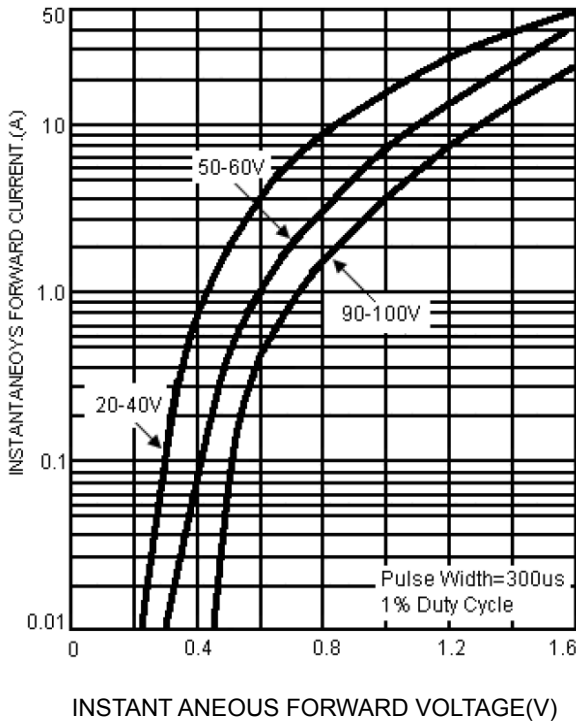
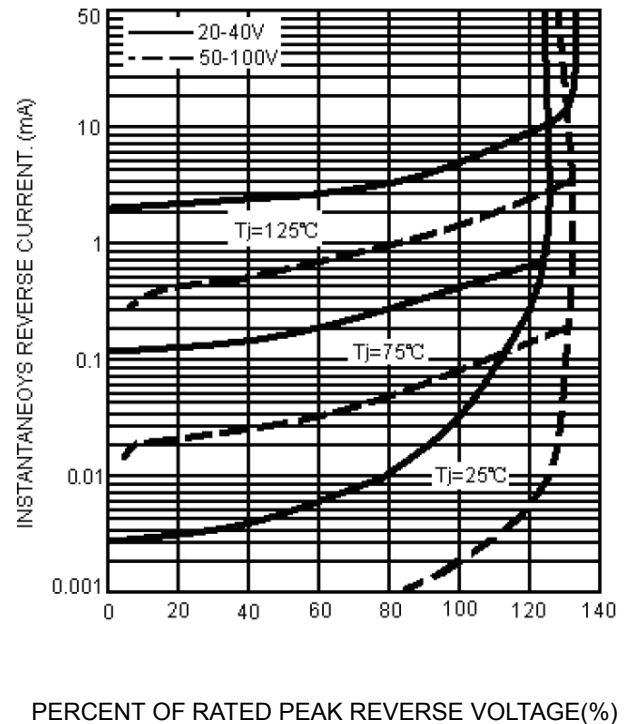


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice.