



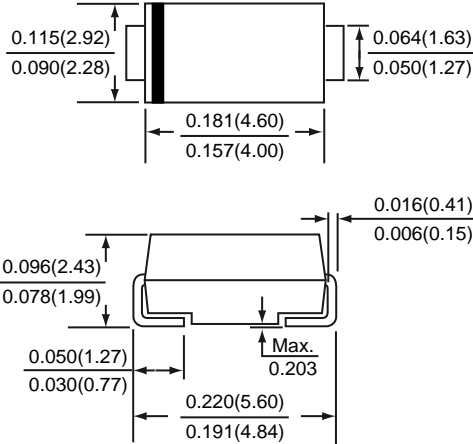
# SS12 THRU SS110

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

*Reverse Voltage - 20 to 100 Volts*

*Forward Current - 1.0 Ampere*

**SMA/DO-214AC**



\*Dimensions in inches and (millimeters)

### FEATURES

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* For surface mount applications
- \* Low profile package
- \* Built-in strain relief
- \* Metal silicon junction, majority carrier conduction
- \* Low power loss, high efficiency
- \* High current capability, low forward voltage drop
- \* High surge capability
- \* For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- \* Guardring for overvoltage protection
- \* High temperature soldering guaranteed : 260°C/10 seconds, at terminals

### MECHANICAL DATA

**Case :** JEDEC DO-214AC molded plastic body  
**Terminals :** Tin plated, solderable per MIL-STD-750D Method 2026  
**Polarity :** Color band denotes cathode end  
**Weight :** 0.002 ounces , 0.064 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.		SYMBOLS	SS12	SS14	SS16	SS110	UNITS
Maximum repetitive peak reverse voltage		VRRM	20	40	60	100	Volts
Maximum RMS voltage		VRMS	14	28	42	70	Volts
Maximum DC blocking voltage		VDC	20	40	60	100	Volts
Maximum average forward rectified current (SEE FIG.1)		I(AV)	1.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	30				Amps
Maximum instantaneous forward voltage at 1.0 A (NOTE 1)		VF	0.50		0.70	0.85	Volts
Maximum DC reverse current at rated DC blocking voltage (NOTE 1)	TA=25°C	IR	0.5				mA
	TA=100°C		10	5.0			
Typical thermal resistance (NOTE 2)		R θJA	88				°C / W
		R θJL	28				
Operating junction temperature range		TJ	-65 to +125		-65 to +150		°C
Storage temperature range		TSTG	-65 to +150				°C

NOTES : (1) Pulse test : 300us pulse width, 1% duty cycle  
 (2) P.C.B. mounted with 0.2 x 0.2" ( 5.0 x 5.0mm ) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS110

FIG.1 - FORWARD CURRENT DERATING CURVE

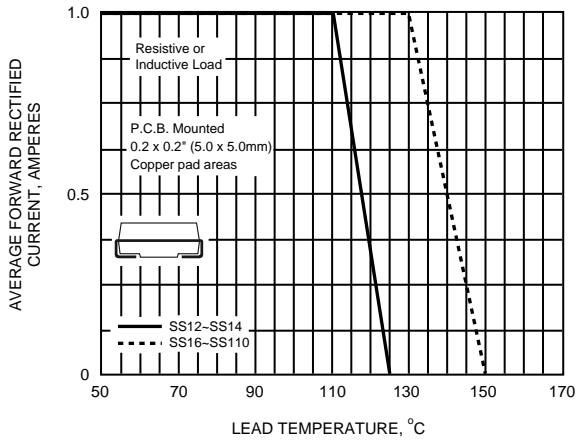


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

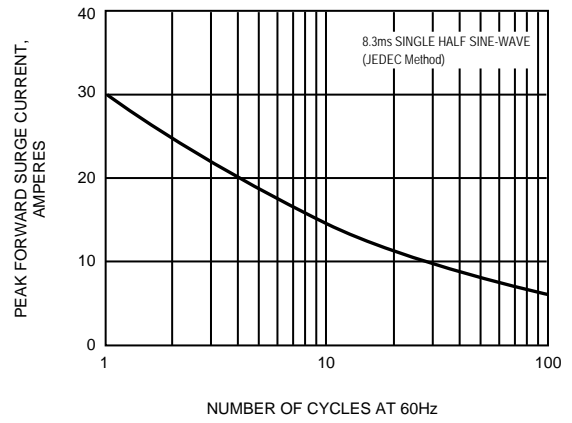


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

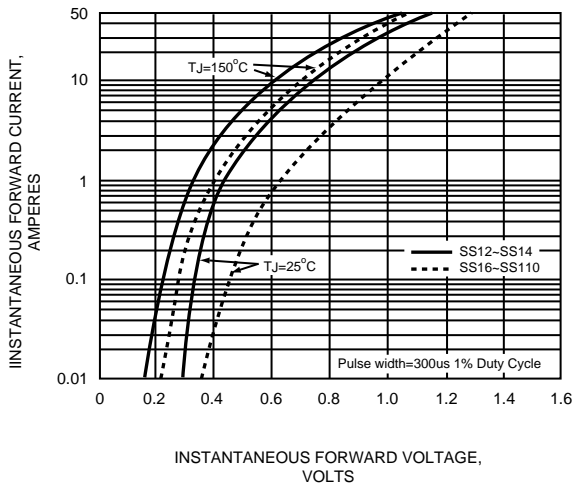


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

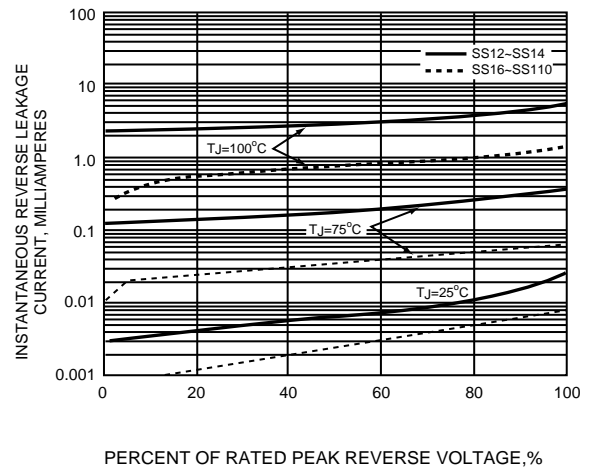


FIG.5 - TYPICAL JUNCTION CAPACITANCE

