

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 to 200 VOLTS FORWARD CURRENT: 1.0 AMPERE

Features

- Plastic package has Underwriters Laboratory
 Flammability Classification 94V-O
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- For surface mounted applications
- High current capability, Low forward voltage drop
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

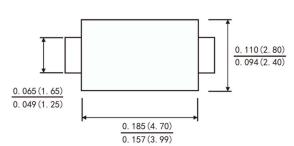
Mechanical Data

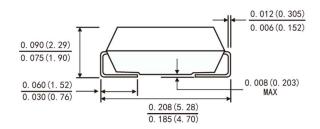
■ Case: JEDEC SMA(DO-214AC)

 Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed

■ Tape Reel: 5000pcs

SMA(DO-214AC)





Dimensions in inches and (millimeters)

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, derate current by 20%.

Parameters / Marking Code		Symbols	SS12	SS13	SS14	SS16	SS110	SS115	SS120	Units
Maximum repetitive peak reverse voltage		Vrrm	20	30	40	60	100	150	200	Volts
Maximum RMS voltage		VRMS	14	21	28	42	71	105	140	Volts
Maximum DC blocking voltage		VDC	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see Fig. 1)		I(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		lfsm	40.0							Amps
Maximum instantaneous forward voltage at 1.0 A(Note 1)		VF	0.55 0.70			0.85	0.90	0.95	Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T)=25°C		100				20			μА
	T _J =100°C] IR	5				-			mA
	T)=125°C		-				3			
Typical junction capacitance(Note 3)		Cı	40 20						PF	
Typical thermal resistance(Note 2)		Røja røjl	88.0 28.0							°C/W
Operating junction temperature range		Tı	-55 to+150							°C
Storage temperature range		Tstg	-55 to+150							°C

NOTES:

- 1. Pulse test: 300µs pulse width, 1% duty cycle
- 2. P.C.B. mounted with 0.2 X 0.2"(5.0 X 5.0mm) copper pad areas
- 3. Measured at 1MHZ and reverse voltage of 4.0 volts



SS12 THRU SS120

<u>Shinsemi</u>

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

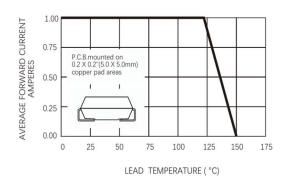


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

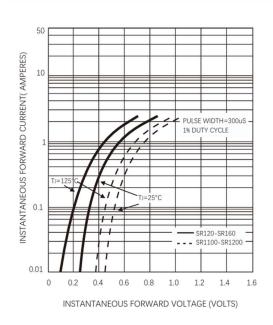


FIG.5-TYPICAL JUNCTION CAPACITANCE

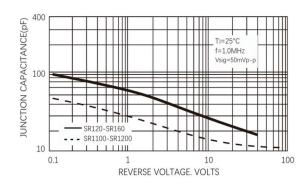


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

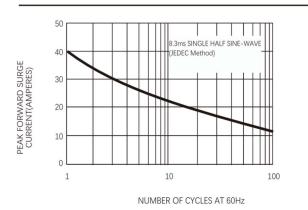
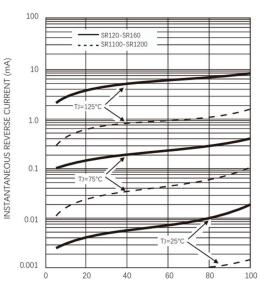


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE%