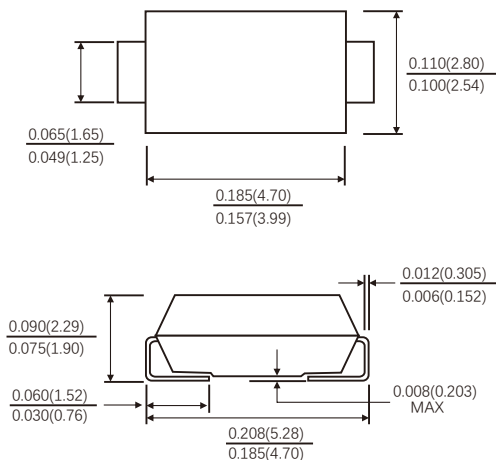


### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage protection
- 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
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



### SMA(DO-214AC)



### MECHANICAL DATA

- Case: JEDEC SMA(DO-214AC) molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002ounce, 0.064 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters		Symbols	SS12	SS13	SS14	SS16	SS110	SS115	SS120	Units
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	20	30	40	60	100	150	200	Volts
Maximum RMS voltage		V <sub>RMS</sub>	14	21	28	42	71	105	140	Volts
Maximum DC blocking voltage		V <sub>DC</sub>	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see Fig. 1 )		I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	40.0							Amps
Maximum instantaneous forward voltage at 1.0 A(Note 1 )		V <sub>F</sub>	0.55		0.70	0.85	0.90			Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T <sub>J</sub> =25°C	I <sub>R</sub>	100				20			μA
	T <sub>J</sub> =100°C		5				-			mA
	T <sub>J</sub> =125°C		-				3			
Typical junction capacitance(Note 3)		C <sub>J</sub>	40				20			pF
Typical thermal resistance(Note 2)		R <sub>θJA</sub> R <sub>θJL</sub>	88.0 28.0							°C/W
Operating junction temperature range		T <sub>J</sub>	-55 to+150							°C
Storage temperature range		T <sub>STG</sub>	-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 1.0MHz and reverse voltage of 4.0 volts

# RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS120

FIG.1-FORWARD CURRENT DERATING CURVE

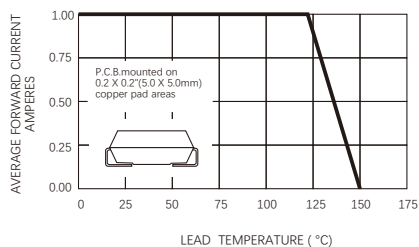


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

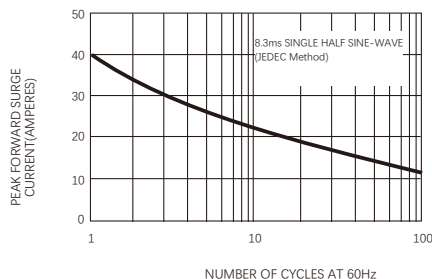


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

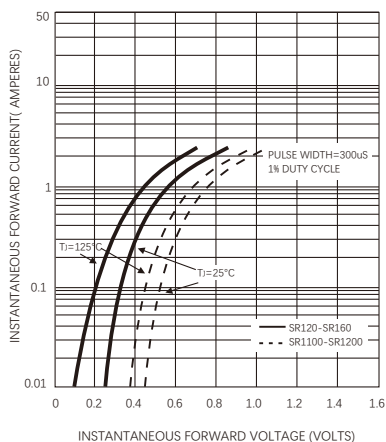


FIG.4-TYPICAL REVERSE CHARACTERISTICS

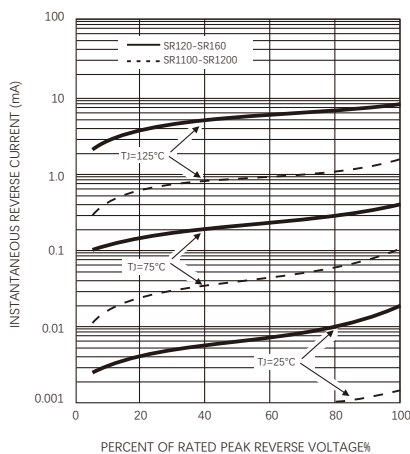
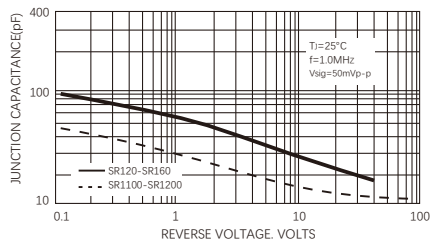


FIG.5-TYPICAL JUNCTION CAPACITANCE



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