



SEMICONDUCTOR

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Built-in strain relief
- For surface mounted applications
- Low profile package
- 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 2011/65/EU

## SS22 THRU SS220

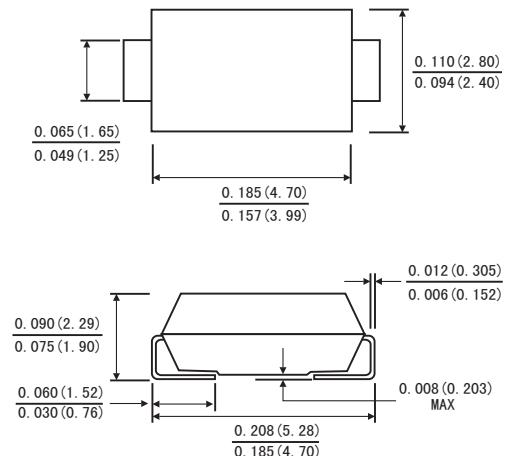
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER  
Reverse Voltage - 20 to 200 Volts  
Forward Current - 2.0Amperes

## 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



### 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 ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SS 22	SS 23	SS 24	SS 26	SS 210	SS 215	SS 220	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	I <sub>(AV)</sub>					2.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>				50.0				Amps
Maximum instantaneous forward voltage at 2.0 A(Note 1)	V <sub>F</sub>		0.55		0.70	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I <sub>R</sub>	TA=25°C TA=100°C TA=125°C		100		20			µA
				5.0		–			mA
				–		3.0			
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: 300 µs 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 SS22 THRU SS220

FIG.1-FORWARD CURRENT DERATING CURVE

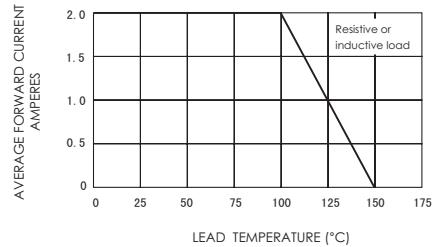


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

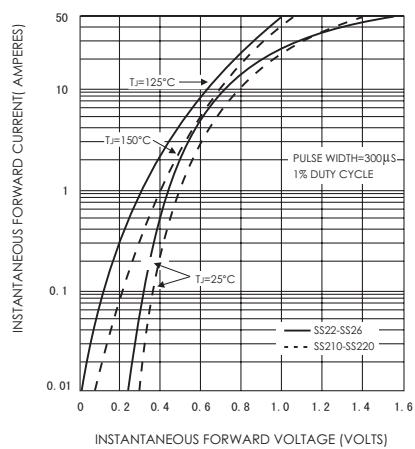


FIG.5-TYPICAL JUNCTION CAPACITANCE

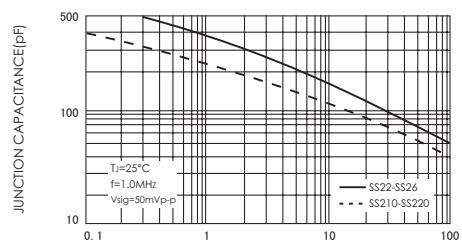


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

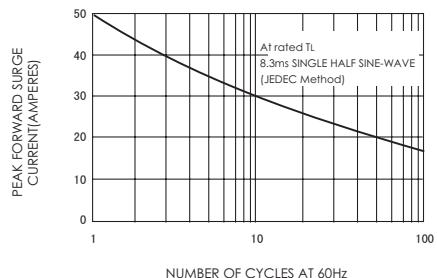


FIG.4-TYPICAL REVERSE CHARACTERISTICS

