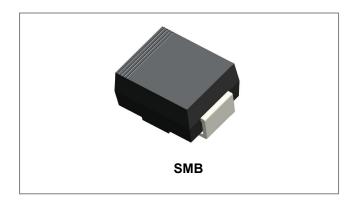






### SS22 THRU SS210 SCHOTTKY RECTIFIER



#### **Features**

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### **Circuit Diagram**



#### **Mechanical Data**

- Case: JEDEC SMB molded plastic body
- Terminals: leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.003 ounce, 0.093 grams
- Mounting Position: Any

# Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Characteristic	Symbol	SS22	SS23	SS24	SS25	SS26	SS28	SS210	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	20	30	40	50	60	80	100	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	71	V
Average Rectified Output Current @T <sub>L</sub> =105°C	lo	2.0			А				
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50			А				
Forward Voltage @ I <sub>O</sub> = 2.0 A	VF		0.50		0.70	)	0.8	35	V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	0.4 10			mA				
Typical Thermal Resistance Junction to Ambient (Note 1)	R <sub>θJA</sub>	75			°C/W				
Operating Temperature Range	TJ	-65 to +125			°C				
Storage Temperature Range	T <sub>STG</sub>	-65 to +150			°C				

Note: 1. mounted on P.C. Board with 8.0mm<sup>2</sup> copper pad areas.

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### **Ratings and Characteristics Curves**

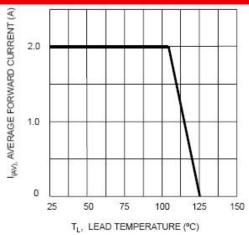
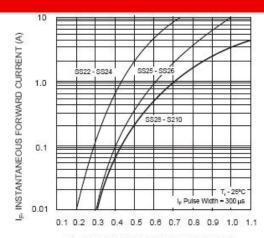
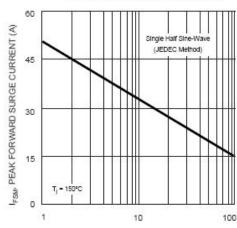


Fig. 1 Forward Current Derating Curve



VF, INSTANTANEOUS FWD VOLTAGE (V) Fig. 2 Typ. Forward Characteristics



NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

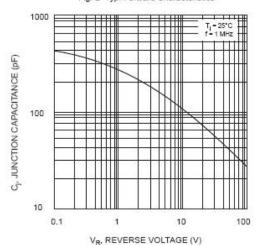


Fig. 4 Typical Junction Capacitance

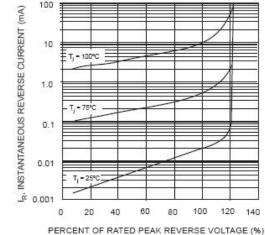


Fig. 5 Typical Reverse Characteristics

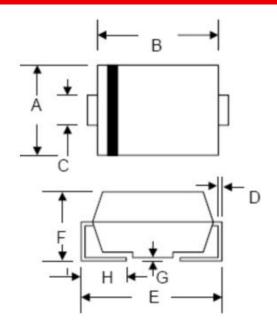
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### **Mechanical Dimensions SMB**



SYMBOL	Millin	meters	Inches			
STWIBOL	Min.	Max.	Min.	Max.		
А	3.30	3.94	0.130	0.155		
В	4.06	4.70	0.160	0.185		
С	1.80	2.20	0.071	0.087		
D	0.152	0.305	0.006	0.012		
Е	4.80	5.59	0.189	0.220		
F	2.10	2.60	0.083	0.102		
G	0.051	0.203	0.002	0.008		
Н	0.76	1.52	0.030	0.060		

# **Ordering Information**

Device	Package	Shipping		
SS22 - SS210	SMB (Pb-Free)	3000pcs / reel		

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

# **Marking Diagram**

SS22 XXXXX Where XXXXX is YYWWL

 SS22
 = Part Name

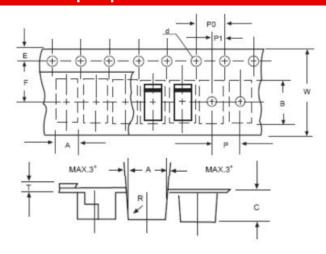
 YY
 = Year

 WW
 = Week

 L
 = Lot Number

**Cautions:** Molding resin Epoxy resin UL:94V-0

### **Carrier Tape Specification SMB**



SYMBOL	Millimeters			
STWIBUL	Min.	Max.		
Α	3.99	4.19		
В	5.72	5.92		
C	3.23	3.43		
d	1.40	1.60		
E	1.40	1.60		
F	5.60	5.70		
Р	7.90	8.10		
P0	3.90	4.10		
P1	1.90	2.10		
Т	-	0.60		
W	11.80	12.20		

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