# Onsemi

### **Schottky Rectifier**

### SS23, SS24, SS25, SS26, SS28, SS29, S210

The SS23-S210 series includes high-efficiency, low power loss, general-propose Schottky rectifiers. The clip-bonded leg structure provides high thermal performance and low electrical resistance. These rectifier are suited for free wheeling, secondary rectification, and reverse polarity protection applications.

#### Features

- Glass-Passivated Junctions
- High–Current Capability, Low V<sub>F</sub>
- This is a Pb-Free and Halid Free Device

#### **Applications:**

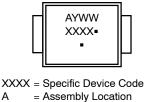
- Low Voltage
- High-Frequency Inverters
- Free Wheeling
- Polarity Protection

#### SCHOTTKY BARRIER RECTIFIER 2.0 AMPERES



SMB CASE 403AF







А

Υ

ww = Work Week = Pb-Free Package

(Note: Microdot may be in either location)

#### **ORDERING INFORMATION**

Part Number	Device Code Marking	Package	Shipping <sup>†</sup>
SS23	SS23	SMB	3000 / Tape & Reel
SS24	SS24	(Pb-Free)	
SS25	SS25		
SS26	SS26		
SS28	SS28		
SS29	SS29		
S210	S210		

+For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

#### SS23, SS24, SS25, SS26, SS28, SS29, S210

#### **MAXIMUM RATINGS** ( $T_A = 25^{\circ}C$ unless otherwise noted)

		Value							
Rating	Symbol	SS23	SS24	SS25	SS26	SS28	SS29	S210	Unit
Maximum Repetitive Reverse Voltage	V <sub>RRM</sub>	30	40	50	60	80	90	100	V
Maximum Average Forward Current: 0.375-inch Lead Length at $T_A = 75^{\circ}C$	I <sub>F(AV)</sub>	2.0						•	A
Non-Repetitive Peak Forward Surge Current: 8.3 ms Single Half-Sine Wave	I <sub>FSM</sub>	50						A	
Storage Temperature Range	T <sub>STG</sub>	-65 to +150				°C			
Operating Junction Temperature	TJ	-65 to +125							°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

#### THERMAL CHARACTERISTICS

Characteristic	Symbol	Value	Unit
Power Dissipation	PD	1.3	W
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\thetaJA}$	75	°C/W

1. Device mounted on FE-4 PCB 0.013 mm.

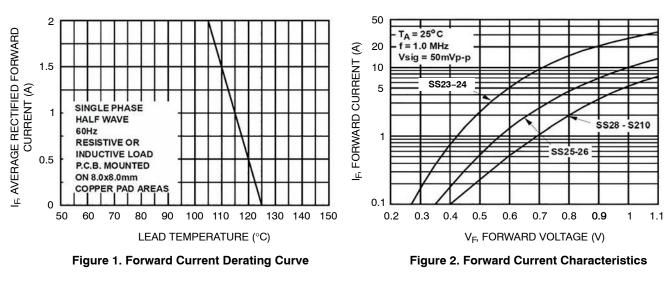
#### **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = $25^{\circ}$ C unless otherwise noted)

			Value							
Symbol	Rating	Test Conditions	SS23	SS24	SS25	SS26	SS28	SS29	S210	Unit
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 2.0 A	500		700		850			mV
I <sub>R</sub>	Reverse Current at	$T_A = 25^{\circ}C$	0.4						mA	
Rated V <sub>R</sub>		$T_A = 100^{\circ}C$	10							

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

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#### **TYPICAL CHARACTERISTICS**



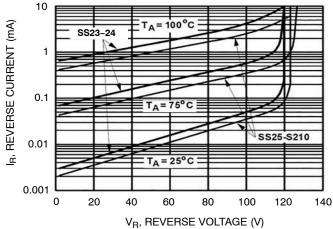


Figure 3. Reverse Current vs. Reverse Voltage

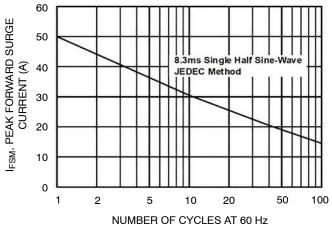


Figure 5. Non-Repetitive Surge Current

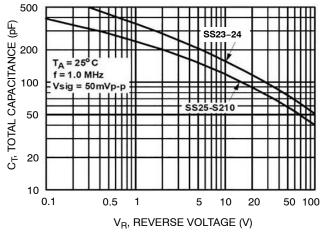
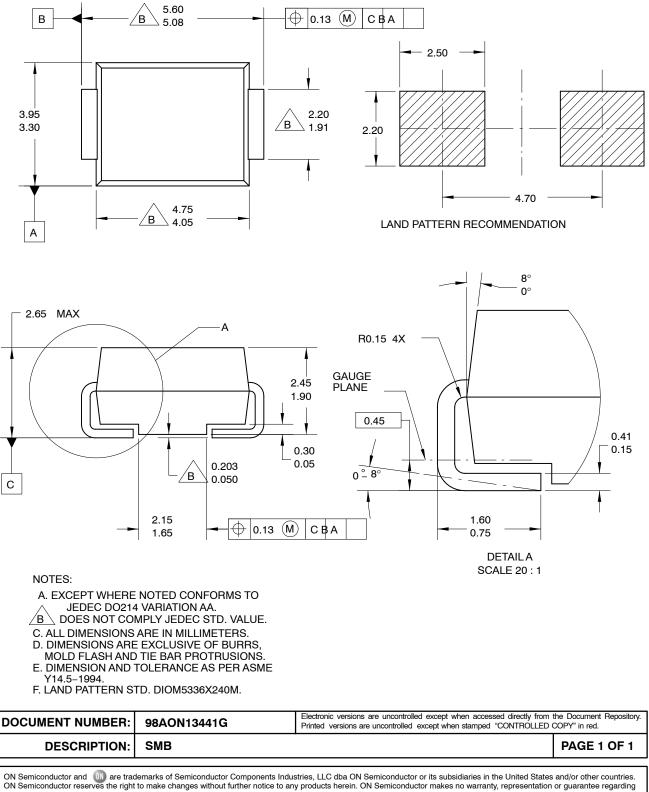


Figure 4. Total Capacitance

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