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# SB520 - SB5100

### Features

- Metal to silicon rectifier, majority carrier conduction.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Low power loss, high efficiency.
- High current capability, low V<sub>F</sub>
- High surge capacity.
- Glass passivated



DO-201AD COLOR BAND DENOTES CATHODE

## **Schottky Rectifiers**

### Absolute Maximum Ratings\* T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter		Units						
-		520	530	540	550	560	580	5100	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	20	30	40	50	60	80	100	V
I <sub>F(AV)</sub>	Average Rectified Forward Current .375 " lead length @ T <sub>A</sub> = 75°C	5.0						А	
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	150					А		
T <sub>stg</sub>	Storage Temperature Range	-50 to +150					°C		
TJ	Operating Junction Temperature	-50 to +150					°C		

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

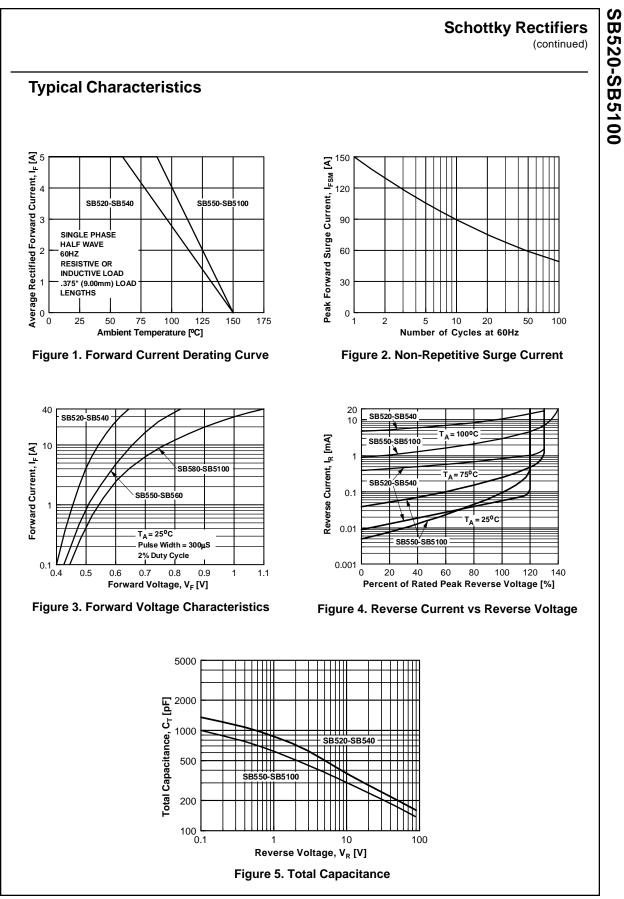
### **Thermal Characteristics**

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	5.0	W
$R_{ ext{ hetaJA}}$	Thermal Resistance, Junction to Ambient	25	°C/W

### Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter		Device							
-		520	530	540	550	560	580	5100	1	
V <sub>F</sub>	Forward Voltage @ 5.0 A	0.55			0.67		0.85		V	
I <sub>R</sub>	Reverse Current @ rated $V_R T_A = 25^{\circ}C$	0.5					mA			
	T <sub>A</sub> = 100°C	50 25				mA				
C <sub>T</sub>	Total Capacitance V <sub>R</sub> = 4.0 V, f = 1.0 MHz	500			380				pF	

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