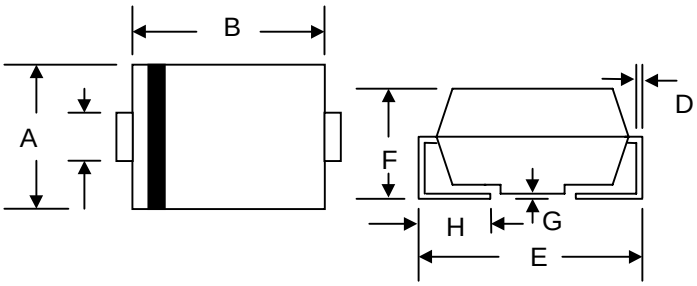
Features

- 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_F.
- High surge capacity.
- Glass passivated



SMC/DO-214AB		
Dim	**Min**	**Max**
A	5.59	6.22
B	6.60	7.11
C	2.75	3.25
D	0.152	0.305
E	7.75	8.13
F	2.00	2.62
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

Schottky Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		52	53	54	55	56	58	510	
V_{RRM}	Maximum Repetitive Reverse Voltage	20	30	40	50	60	80	100	V
$I_{F(AV)}$	Average Rectified Forward Current .375 " lead length @ T_A = 75°C	5.0							A
I_{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	150							A
T_{stg}	Storage Temperature Range	-50 to +175							°C
T_J	Operating Junction Temperature	-50 to +175							°C

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

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	6.0	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	25	°C/W

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter	Device							Units
		52	53	54	55	56	58	510	
V_F	Forward Voltage @ 5.0 A	0.55			0.67		0.85		V
I_R	Reverse Current @ rated V_R T_A = 25°C	0.5							mA
	T_A = 100°C	50			25				mA
C_T	Total Capacitance V_R = 4.0 V, f = 1.0 MHz	500			380				pF

Typical Characteristics

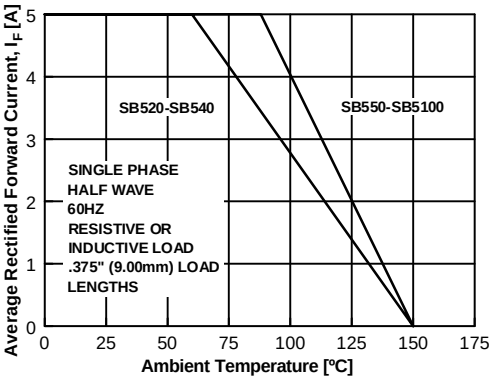


Figure 1. Forward Current Derating Curve

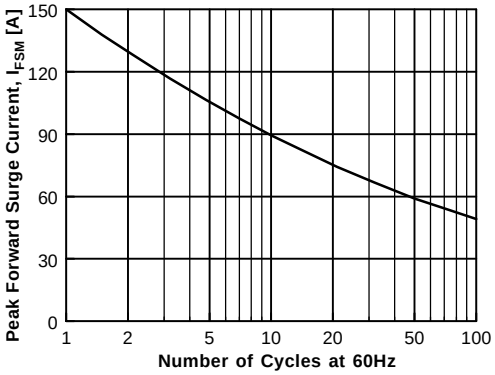


Figure 2. Non-Repetitive Surge Current

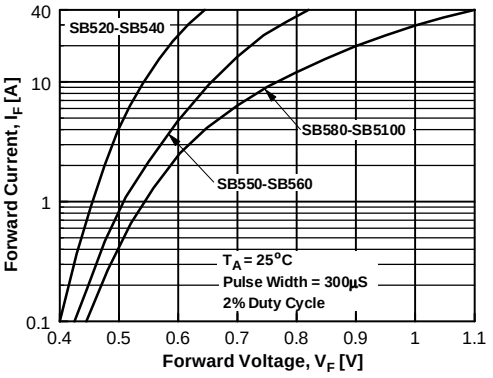


Figure 3. Forward Voltage Characteristics

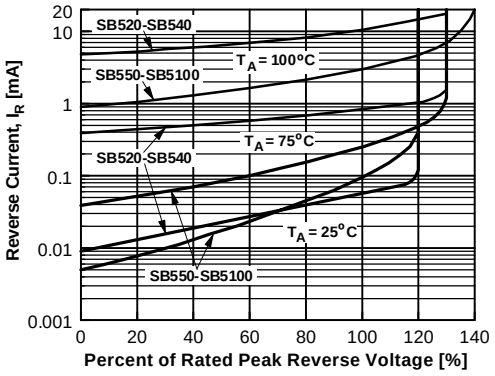


Figure 4. Reverse Current vs Reverse Voltage

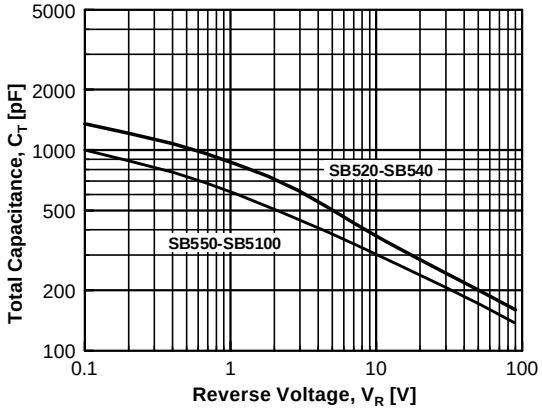


Figure 5. Total Capacitance

ORDERING INFORMATION

Order Code	Package	Baseqty	Deliverymode
UMW SS52C	SMC	3000	Tape and reel
UMW SS53C	SMC	3000	Tape and reel
UMW SS54C	SMC	3000	Tape and reel
UMW SS55C	SMC	3000	Tape and reel
UMW SS56C	SMC	3000	Tape and reel
UMW SS58C	SMC	3000	Tape and reel
UMW SS510C	SMC	3000	Tape and reel