

Silicon Rectifier

2.0A, 50~1000V DO-214AA SMB

S2x series

MERITEK

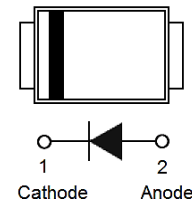
FEATURE

- Glass Passivated Die Constructon
- Maximum Average Forward Rectified Current : 2A
- Low forward voltage drop
- Low Profile Package
- For surface mounted applications



MECHANICAL DATA

- Case: DO-214AA SMB, Molded Plastic
- Terminals: Solderable per MIL-STD, Method 2026
- Flammability Classification 94V-0
- Polarity: Color Band Denotes Cathode End



MAXIMUM RATING

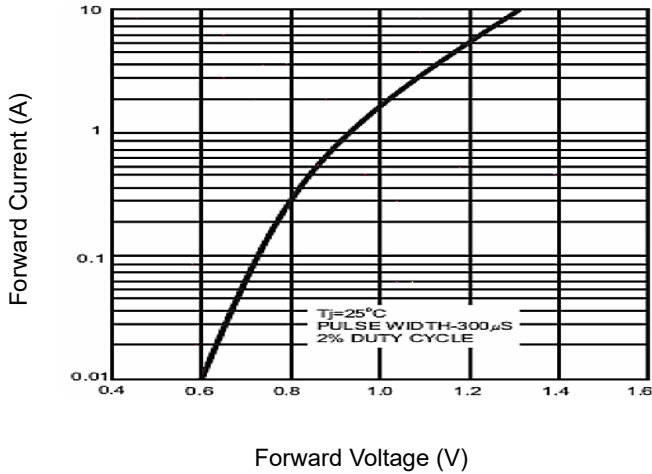
Parameter	Symbol	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000		
Maximum Average Forward Rectified Current at $T_L=100^{\circ}C$	$I_{F(AV)}$	2.0							A	
Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A	
Maximum Forward Voltage at 2A	V_F	1.10							V	
Maximum Reverse Current	$T_A=25^{\circ}C$	I_R							5.0	μA
	$T_A=125^{\circ}C$								125.0	
Typical Junction Capacitance	C_J	30							pF	
Maximum Reverse Recovery	T_{RR}	2							μs	
Typical Thermal Resistance	$R_{\theta JL}$	150							$^{\circ}C/W$	
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150							$^{\circ}C$	

Note:

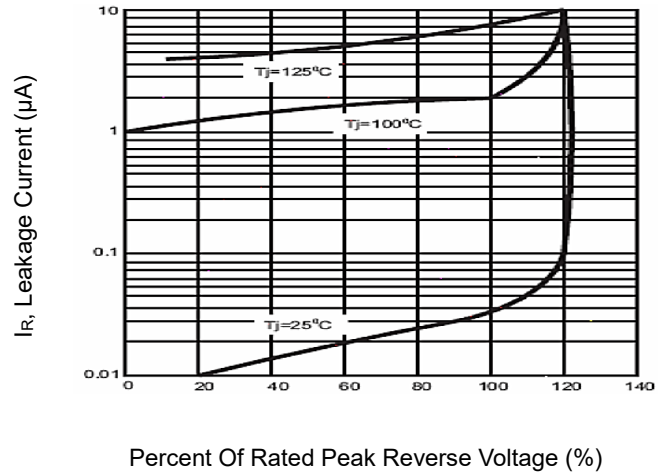
1. $T_A = 25^{\circ}C$ unless otherwise specified.
2. For capacitive load, derate current by 20%.
3. C_J at $V_R=4.0V_{DC}$, $f=1MHz$.
4. Reverse Recovery Test Conditions : $I_F=10mA$ to $I_R=1mA$, $V_R=6V$, $R_L=100\Omega$.

CHARACTERISTIC CURVES

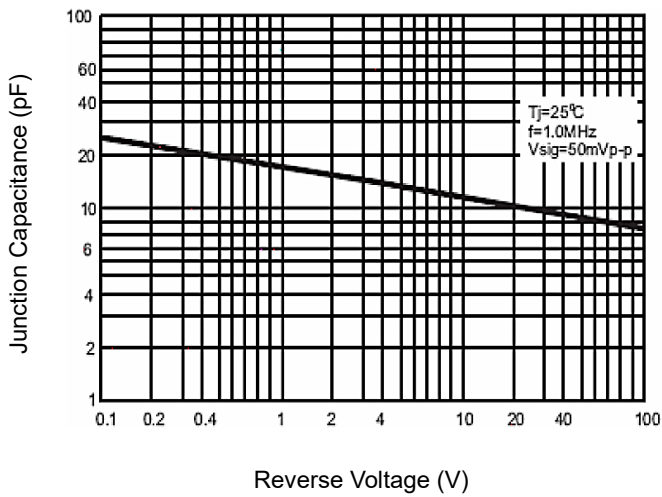
Typical Forward Characteristics



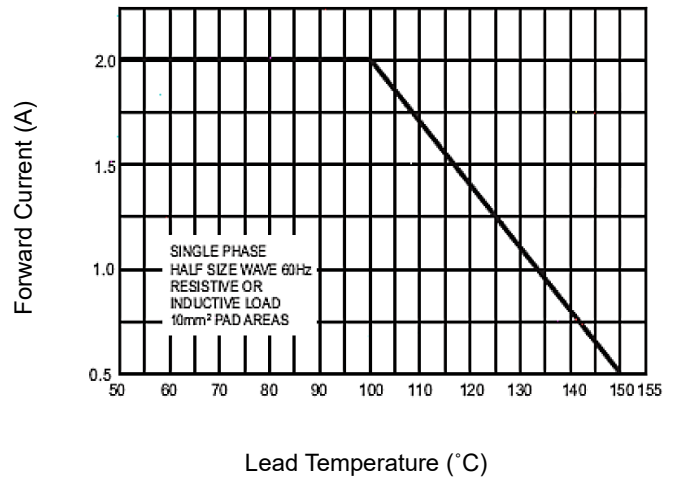
Typical Reverse Characteristics



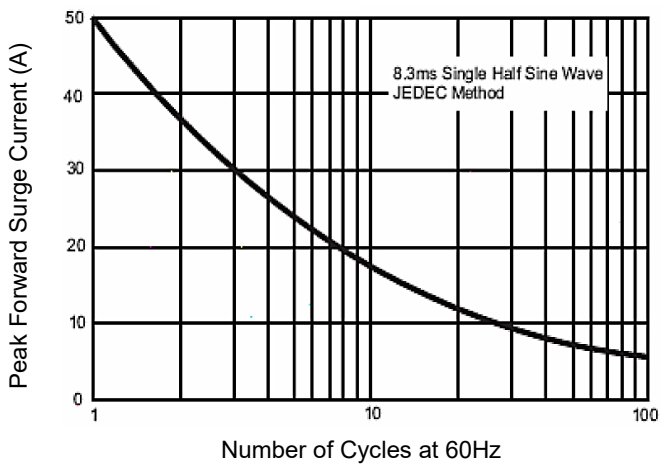
Typical Junction Capacitance



Forward Current Derating Curve



Maximum Non-Repetitive Forward Surge Current



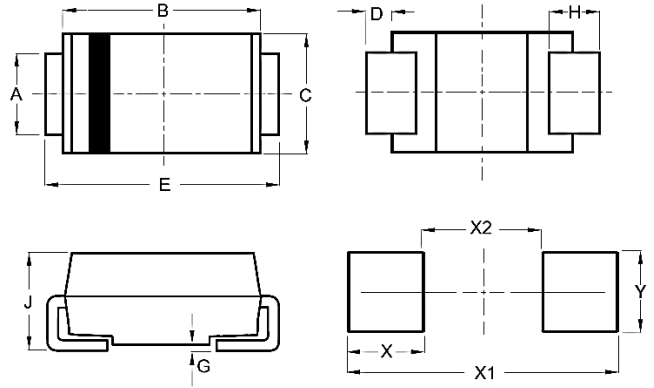
Silicon Rectifier
2.0A, 50~1000V DO-214AA SMB

S2x series

MERITEK

DIMENSIONS

Item	DO-214AA (SMB)	
	Min. (mm)	Max. (mm)
A	1.910	2.200
B	4.020	4.850
C	3.260	3.940
D	0.152	0.305
E	5.080	5.590
G	0.000	0.203
H	0.760	1.520
J	2.110	2.440
X	2.070	
X1	5.800	
X2	1.660	
Y	2.060	



*Specifications subject to change without notice.