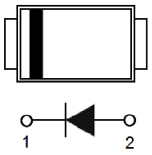
Silicon Rectifier
2A 50~1000V DO-214AA SMB

S2 Series

MERITEK

FEATURE

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Low Profile Package
- Built in Strain Relief
- Application: Rectification, Reverse Polarity Protection, Freewheeling



RoHS

MECHANICAL DATA

- Case: DO-214AA (SMB), Molded Epoxy Meets UL 94V-0
- Terminals: Solder Plated, Solderable Per MIL-STD-750, Method 2026
- Polarity: Color Band Denotes Cathode End

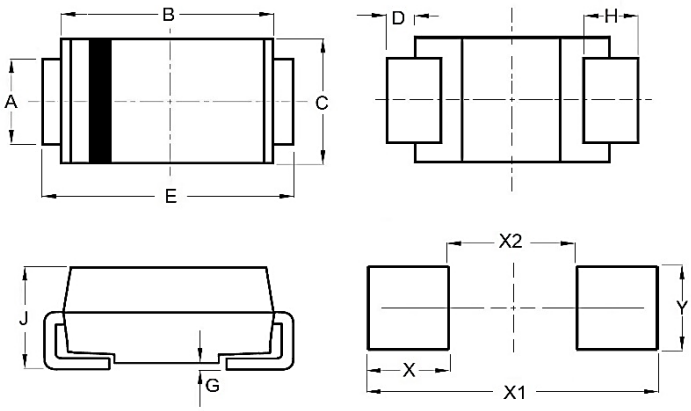
MAXIMUM RATINGS AND ELECTRICAL CHATACTERISTIC

Parameter		Symbol	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Unit
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	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	2.0							A
Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave Superimposed on Rate Load		I_{FSM}	50.0							A
Maximum Forward Voltage at I_F =2.0A		V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	T_J=25˚C	I_R	5							μA
	T_J=100˚C		125							
Thermal Resistance from junction to ambient		$R_{\Theta JL}$	16							˚C/W
Diode Junction Capacitance	V_R=4V, f=1MHz	C_J	30							pF
Maximum Reverse Recovery Time		t_{rr}	2							μs
Operating Junction and Storage Temperature Range		T_J, T_{STG}	-55 ~ +150							˚C

Notes:
1. T_A=25˚C unless otherwise specified
2. Thermal resistance from junction to lead mounted on P.C.B. with 0.3"x0.3" (8.0x8.0mm) copper pad areas.
3. Reverse recovery time test condition, I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

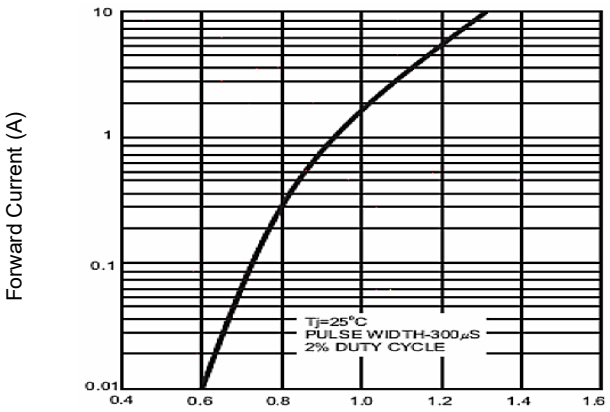
DIMENSIONS

Item	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	

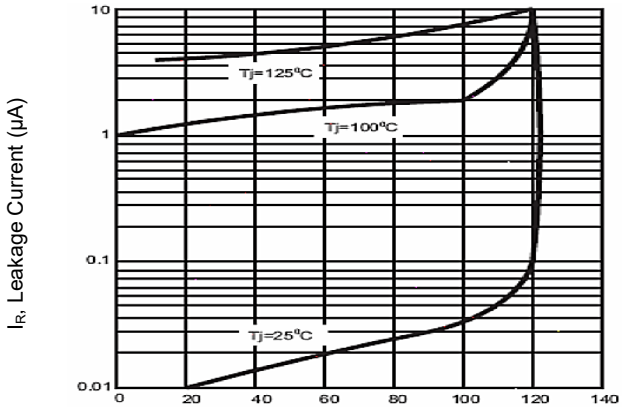


CHARACTERISTIC CURVES

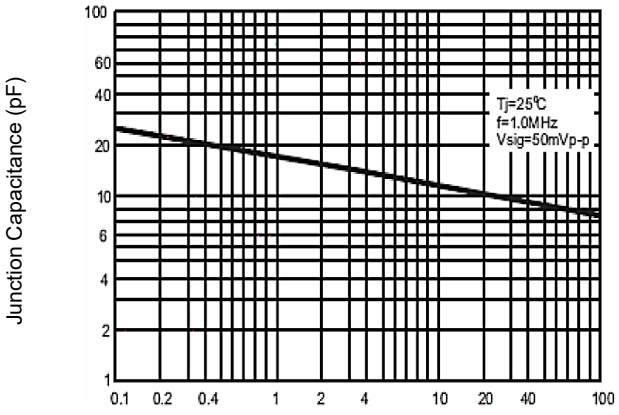
Typical Forward Characteristics



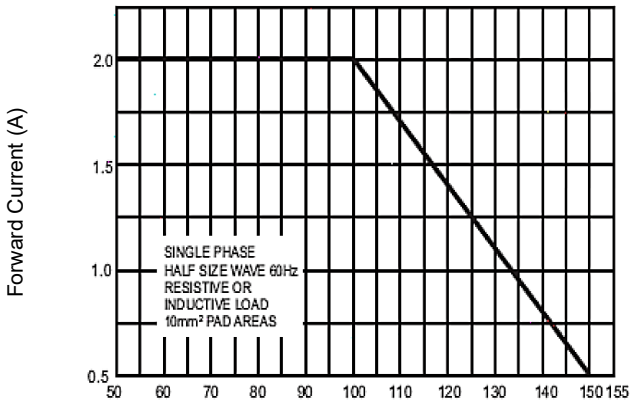
Typical Reverse Characteristics



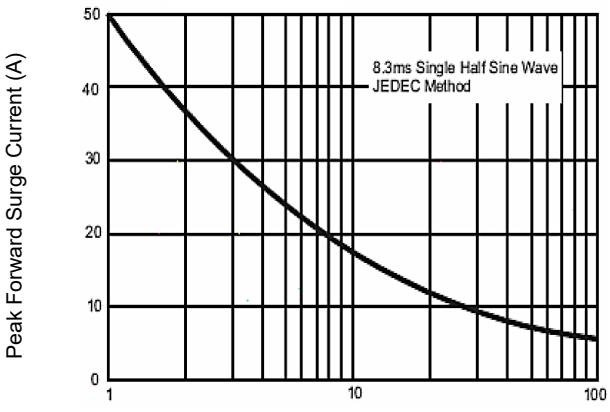
Typical Junction Capacitance



Forward Current Derating Curve



Maximum Non-Repetitive Forward Surge Current



*Specifications subject to change without notice.