S2A THRU S2M

General Purpose Rectifier Diodes

Features

- $I_{F(AV)}$ 2A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- S2X

X : From A To M

SMB top view

Schematic diagram

Pb-Free RoHS Halogen-Free

Limiting Values(Absolute Maximum Rating)

Symbol	Parameter	Test Conditions	S2							Unit
			A	B	D	G	J	K	M	
V_{RRM}	Maximum Repetitive Peak Reverse Voltage		50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS voltage		35	70	140	280	420	560	700	V
$I_{F(AV)}$	Average Forward Current	60Hz Half-sine wave Resistance load	2							A
I_{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle,Ta=25°C	50							A
T_j,T_{stg}	Operating and Storage Temperature Range		-55~+150							°C

Electrical Characteristics (T=25℃ Unless otherwise specified）

Item	Symbol	Test Condition	S2							Unit
			A	B	D	G	J	K	M	
Peak Forward Voltage	V_F	I_F =2.0A	1.1							V
Peak Reverse Current	I_{RRM1}	V_{RM}=V_{RRM} Ta =25℃	5							μA
	I_{RRM2}	V_{RM}=V_{RRM} Ta =125℃	125							
Thermal Resistance	$R_{\theta J-A}$	Between junction and ambient	68							℃/W
	$R_{\theta J-L}$	Between junction and terminal	18							
Juction Capacitance (Typical)	Cj	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C	10							pF

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Typical Characteristics

Fig.1 Forward Current Derating Curve

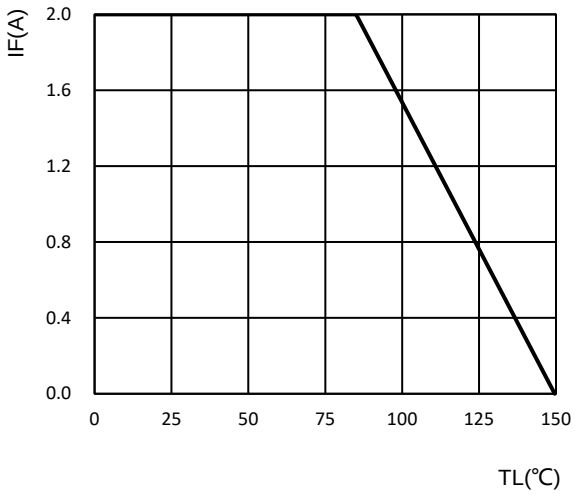


Fig.2 Maximum Non-Repetitive Forward Surge Current

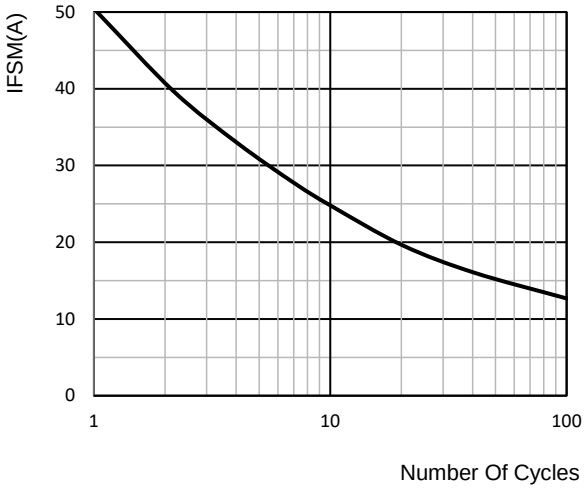


Fig.3 Typical Forward Characteristics

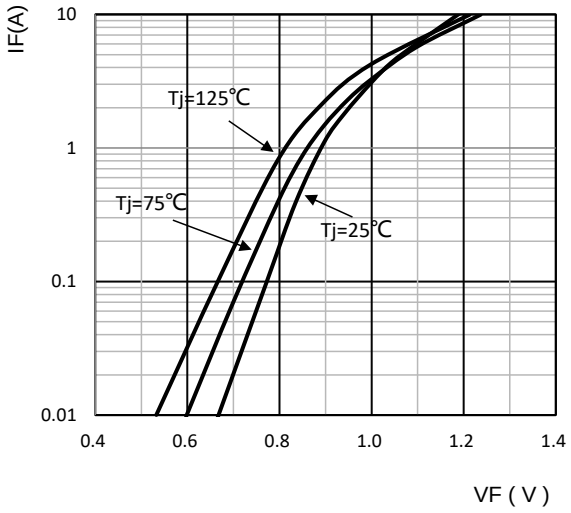
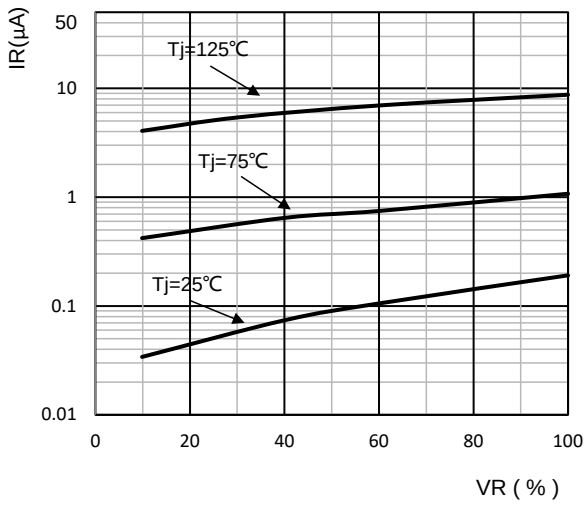


Fig.4 Typical Reverse Characteristics



Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
S2A	SMB	A	2,000	1,000	100,000	7"reel
S2B		B				
S2D		D				
S2G		G				
S2J		J				
S2K		K				
S2M		M				

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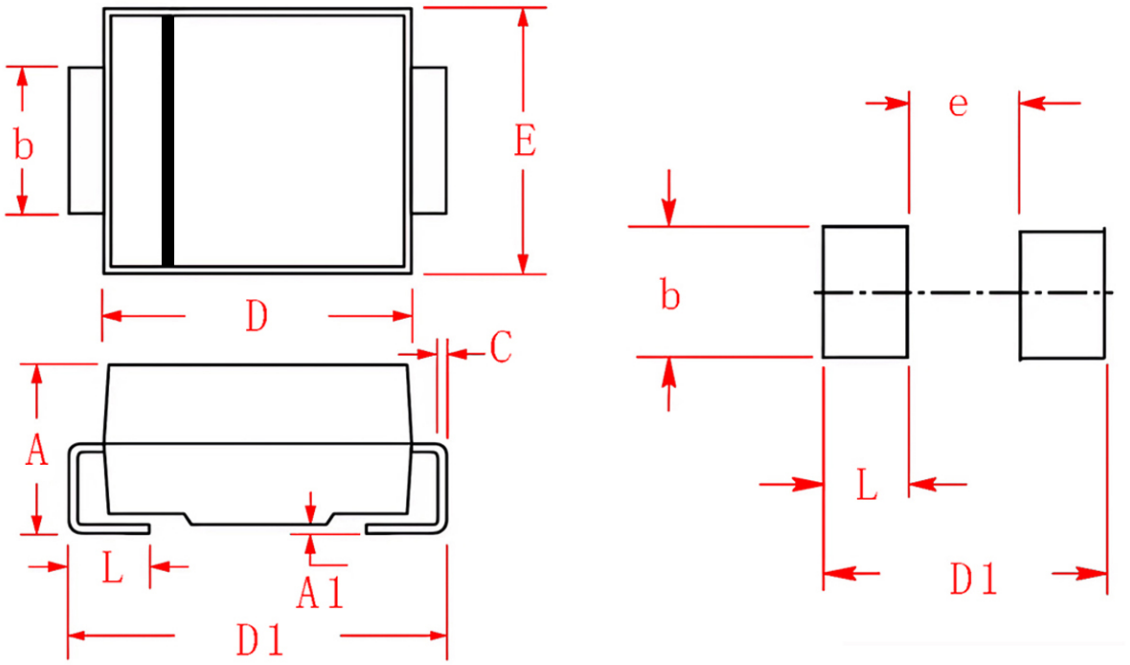
SMB Package information

SMB (DO-214AA)



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	2.130	2.440	0.084	0.096
A1	0.050	0.200	0.002	0.008
b	1.900	2.200	0.075	0.087
C	0.152	0.305	0.006	0.012
D	4.060	4.700	0.160	0.185
D1	5.080	5.590	0.200	0.220
E	3.300	3.940	0.130	0.155
e	-	2.159	-	0.085
L	0.800	1.500	0.031	0.059

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