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

SMA 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,T_L = 93℃	2							A
I_{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle,Ta=25℃	50							A
T_j,T_{stg}	Operating and Storage Temperature Range		-55~+150							℃

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	75							℃/W
	$R_{\theta J-L}$	Between junction and terminal	26							
	$R_{\theta J-C}$	Between junction and case	10							
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

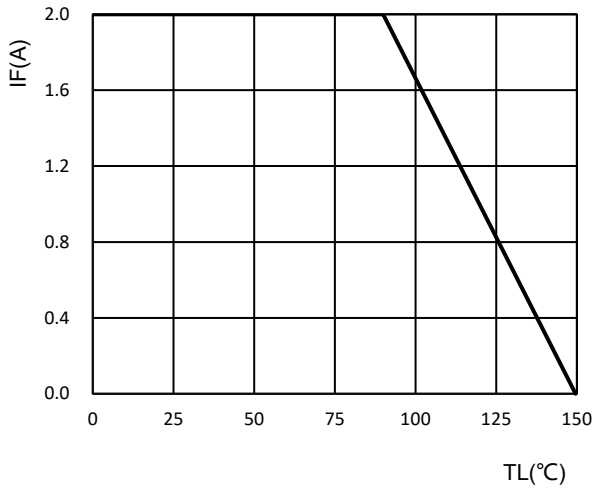


Fig.2 Maximum Non-Repetitive Forward Surge Current

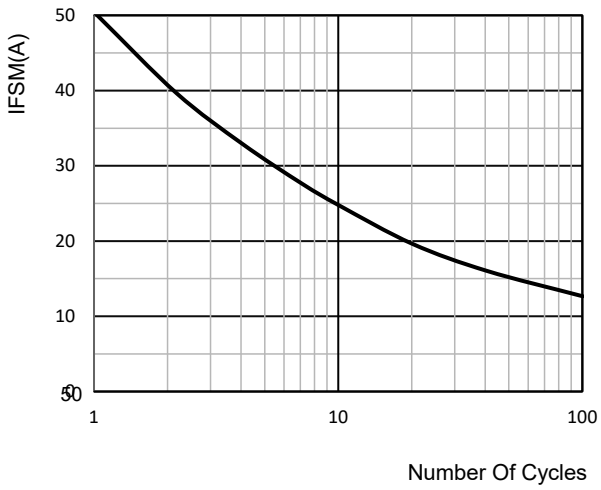


Fig.3 Typical Forward Characteristics

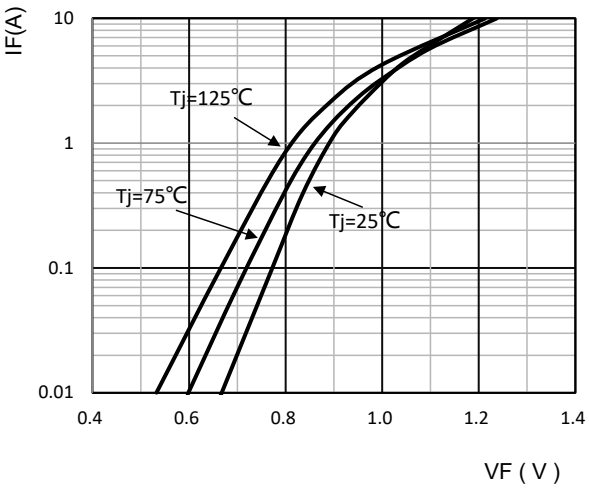
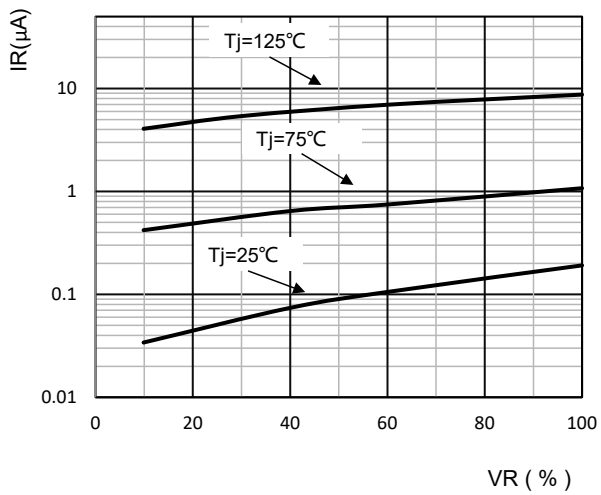


Fig.4 Typical Reverse Characteristics



Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
S2A	SMA	S2A	2,000	10,000	100,000	7"reel
S2B		S2B				
S2D		S2D				
S2G		S2G				
S2J		S2J				
S2K		S2K				
S2M		S2M				

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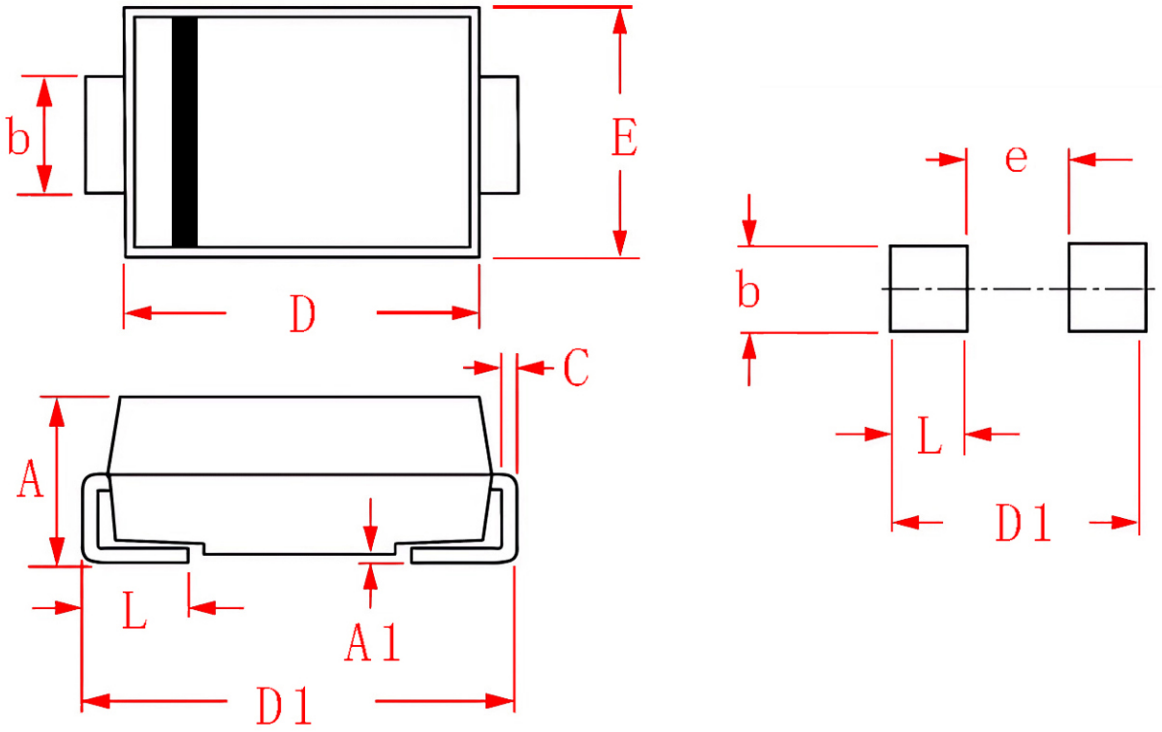
SMA Package information

SMA (DO-214AC)



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.900	2.200	0.075	0.087
A1	0.050	0.200	0.002	0.008
b	1.300	1.600	0.051	0.063
C	0.150	0.310	0.006	0.012
D	4.000	4.500	0.157	0.177
D1	4.700	5.200	0.185	0.205
E	2.300	2.700	0.090	0.106
e	-	1.880	-	0.074
L	0.900	1.500	0.035	0.059

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