

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- S3X

X : From A To M



SMC top view



Schematic diagram



Halogen-Free

Limiting Values(Absolute Maximum Rating)

Symbol	Parameter	Test Conditions	S3							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	3							A
I_{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	100							A
T_J, T_{stg}	Operating and Storage Temperature Range		-55~+150							$^{\circ}\text{C}$

Electrical Characteristics ($T=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Test Condition	S3							Unit
			A	B	D	G	J	K	M	
Peak Forward Voltage	V _F	I _F =3.0A	1.15							V
Peak Reverse Current	I _{RRM1}	V _{RM} =V _{RRM} Ta =25℃	10							μA
	I _{RRM2}	V _{RM} =V _{RRM} Ta =125℃	250							
Thermal Resistance (Typical)	R _{θJ-A}	Between junction and ambient	102							℃/W
	R _{θJ-L}	Between junction and terminal	7							
Juction Capacitance (Typical)	Cj	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C	23							pF

Typical Characteristics

Fig.1 Forward Current Derating Curve

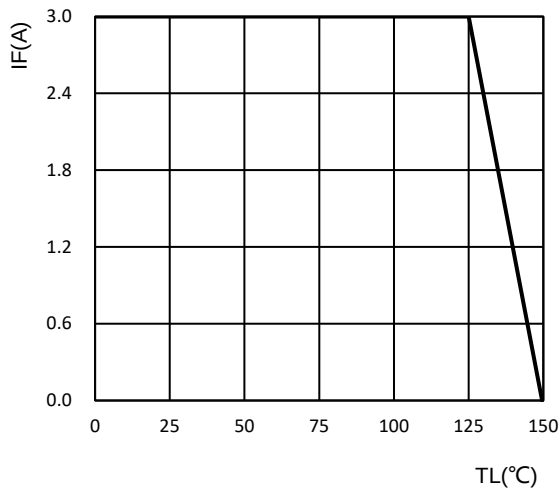


Fig.2 Maximum Non-Repetitive Forward Surge Current

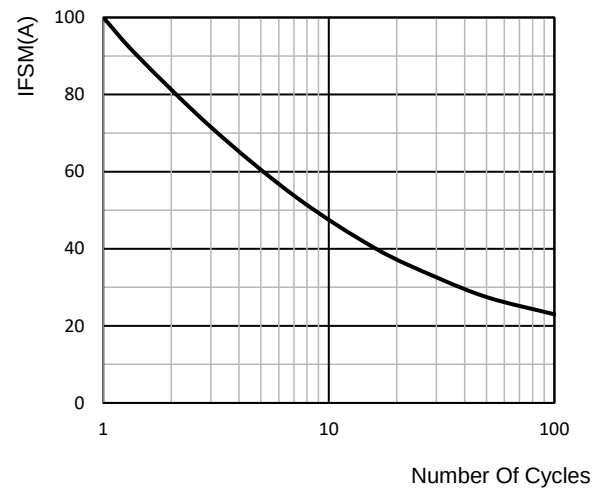


Fig.3 Typical Forward Characteristics

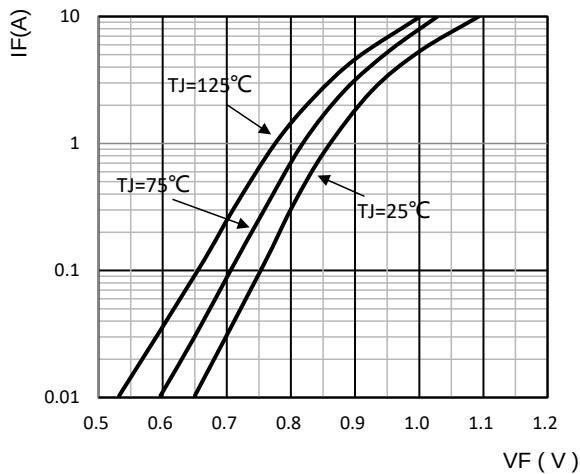
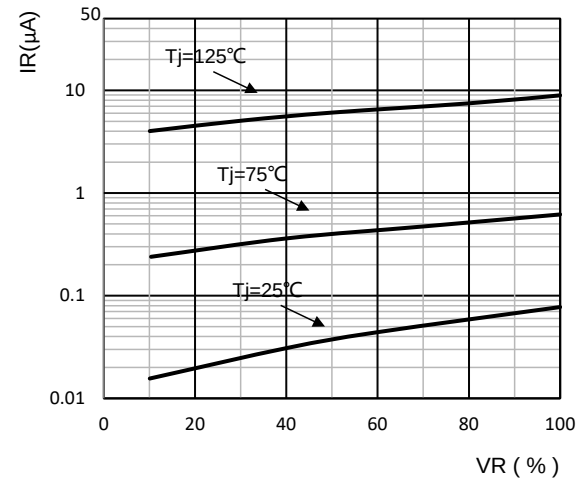


Fig.4 Typical Reverse Characteristics

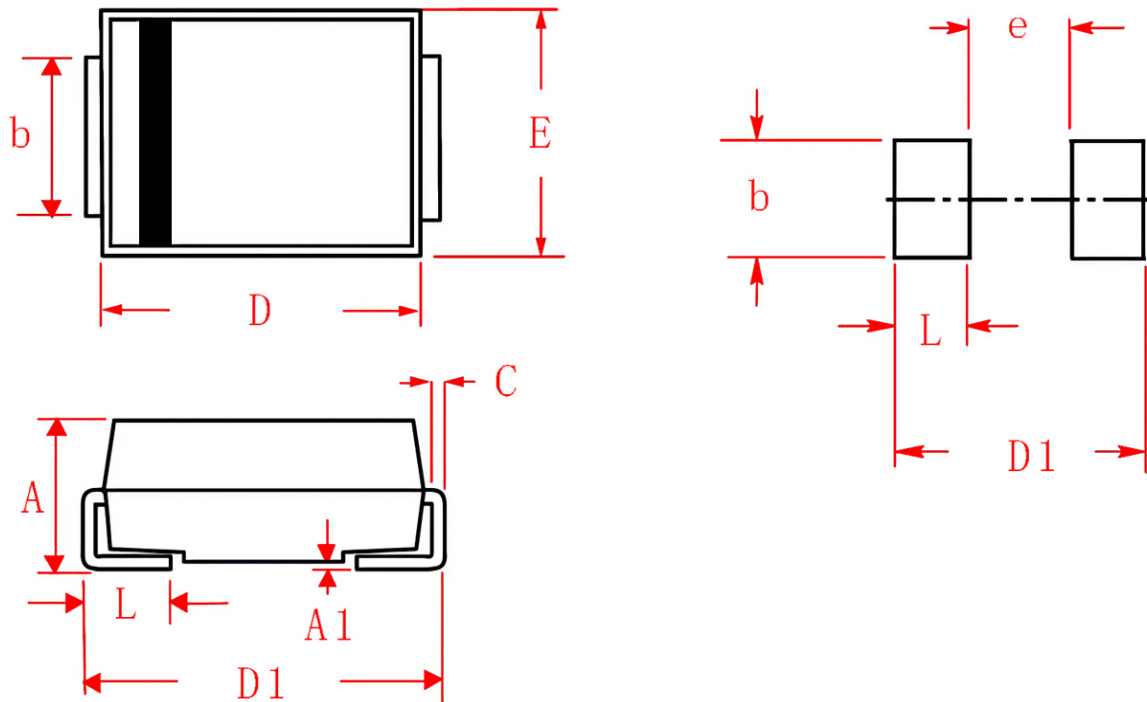


Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
S3A	SMC	A	3,000	45,000	180,000	7"reel
S3B		B				
S3D		D				
S3G		G				
S3J		J				
S3K		K				
S3M		M				

SMC Package information

SMC (DO-214AB)



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	2.000	2.620	0.079	0.103
A1	0.050	0.210	0.002	0.008
b	2.750	3.250	0.108	0.128
C	0.150	0.310	0.006	0.012
D	6.500	7.000	0.256	0.275
D1	7.600	8.000	0.299	0.315
E	5.600	6.200	0.220	0.244
e	-	4.690	-	0.185
L	0.900	1.600	0.035	0.063