

Features

- $I_{F(AV)}$ 10A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- S10X

X : From A To M



SMC top view



Schematic diagram



Halogen-Free

Limiting Values(Absolute Maximum Rating)

Symbol	Parameter	Test Conditions	S10							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	10							A
I _{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, Ta=25℃	240							A
T _j , T _{stg}	Operating and Storage Temperature Range		-55~+150							℃

Electrical Characteristics (T=25°C Unless otherwise specified)

Item	Symbol	Test Condition	S10							Unit
			A	B	D	G	J	K	M	
Peak Forward Voltage	V _F	I _F =10.0A	1							V
Peak Reverse Current	I _{RRM1}	V _{RM} =V _{RRM} Ta =25℃	5							μA
	I _{RRM2}	V _{RM} =V _{RRM} Ta =125℃	250							
Thermal Resistance (Typical)	R _{θJ-A}	Between junction and ambient	98							℃/W
	R _{θJ-L}	Between junction and terminal	4.5							
Juction Capacitance (Typical)	Cj	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C	67							pF

Typical Characteristics

Fig.1 Forward Current Derating Curve

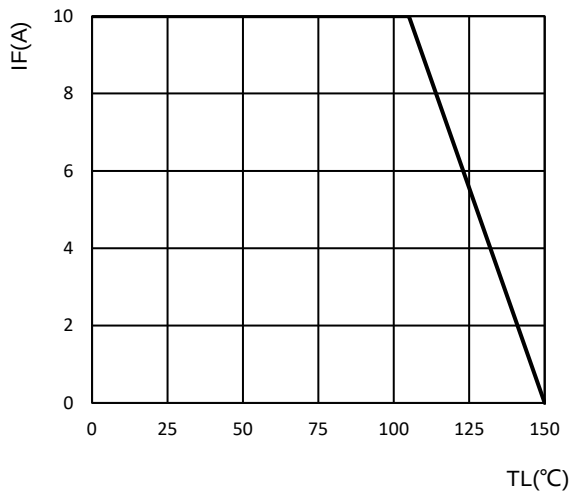


Fig.2 Maximum Non-Repetitive Forward Surge Current

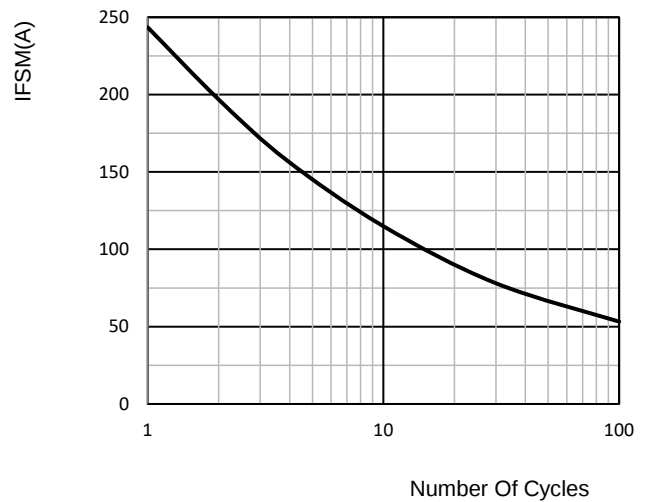


Fig.3 Typical Forward Characteristics

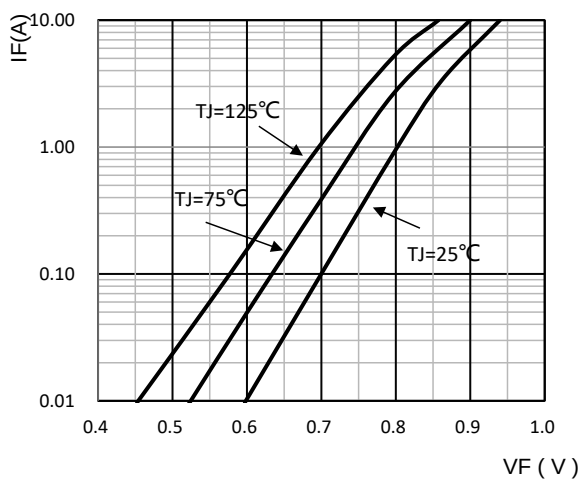
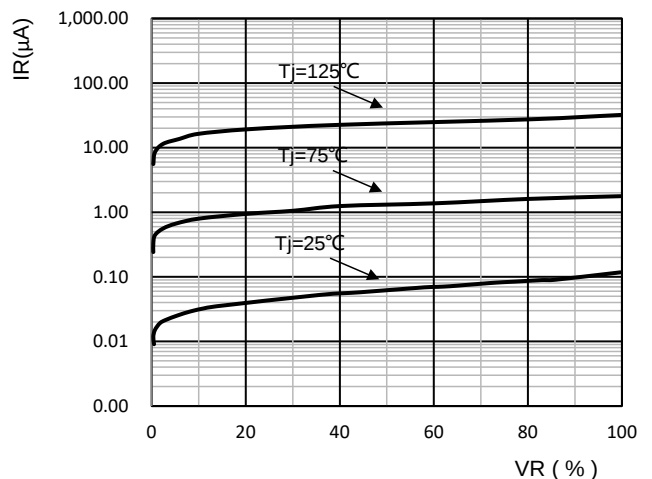


Fig.4 Typical Reverse Characteristics

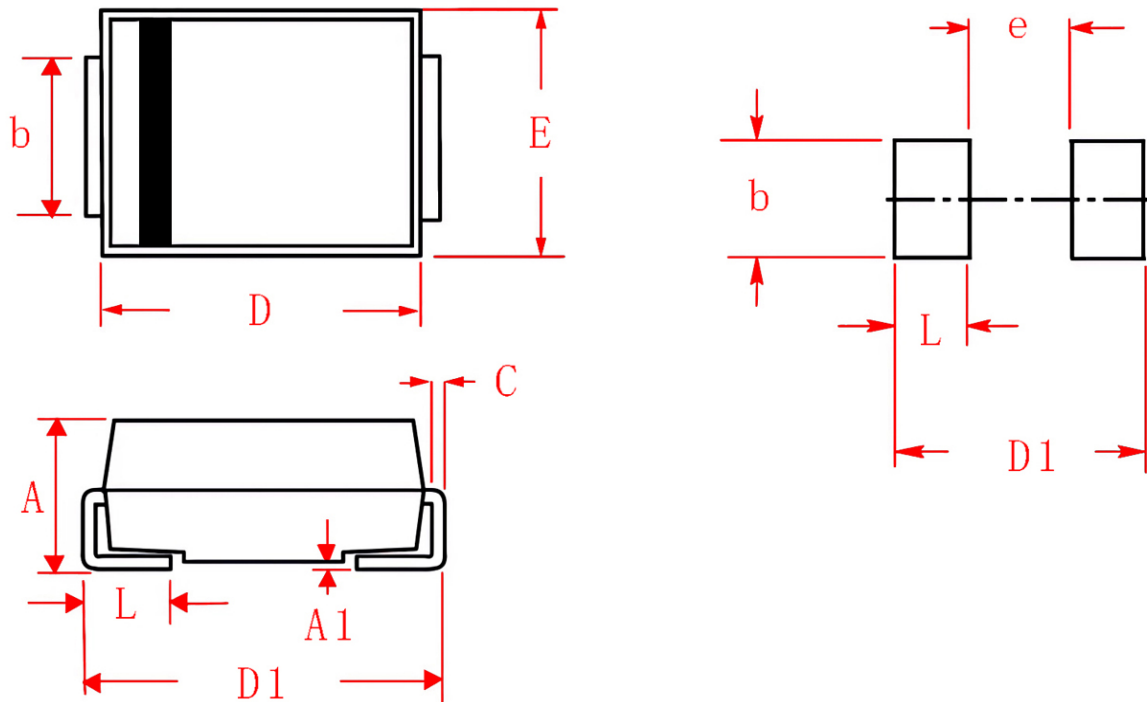


Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
S10A	SMC	A	3,000	45,000	180,000	7"reel
S10B		B				
S10D		D				
S10G		G				
S10J		J				
S10K		K				
S10M		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