

Features

- $I_{F(AV)}$ 8A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- SK8X

X : From 2 To 20



SMC top view



Schematic diagram



Halogen-Free

Limiting Values(Absolute Maximum Rating)

Symbol	Parameter	Test Conditions	SK8									Unit
			2	3	4	5	6	8	10	15	20	
V _{RRM}	Repetitive Peak Reverse Voltage		20	30	40	50	60	80	100	150	200	V
V _{RMS}	Maximum RMS voltage		14	21	28	35	42	56	70	105	140	V
V _{DC}	Maximum DC Blocking Voltage		20	30	40	50	60	80	100	150	200	V
I _{F(AV)}	Average Forward Current	60Hz Half-sine wave Resistance load	8.0									A
I _{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, Ta=25℃	200									A
T _J	Junction Temperature		-55~+150									℃
T _{stg}	Storage Temperature Range		-55~+150									℃

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

Item	Symbol	Test Condition	SK8								Unit	
			2	3	4	5	6	8	10	15		20
Peak Forward Voltage	V _F	I _F =8.0A	0.55			0.7		0.85		0.95		V
Peak Reverse Current	I _{RRM1}	V _{RM} =V _{RRM} Ta =25℃	0.5					0.1				mA
	I _{RRM2}	V _{RM} =V _{RRM} Ta =100℃	20					10				
Thermal Resistance(Typical)	R _{θJ-A}	Between junction and ambient	95									℃/W
	R _{θJ-L}	Between junction and terminal	8									
Juction Capacitance (Typical)	C _j	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C	480			360		246		175	136	pF

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SK82	SMC	SK82	3,000	45,000	180,000	7"reel
SK83		SK83				
SK84		SK84				
SK85		SK85				
SK86		SK86				
SK88		SK88				
SK810		SK810				
SK815		SK815				
SK820		SK820				

Typical Characteristics

Fig.1 Forward Current Derating Curve

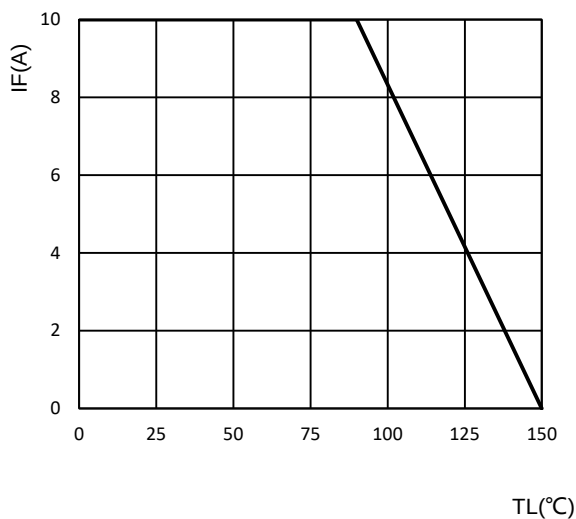
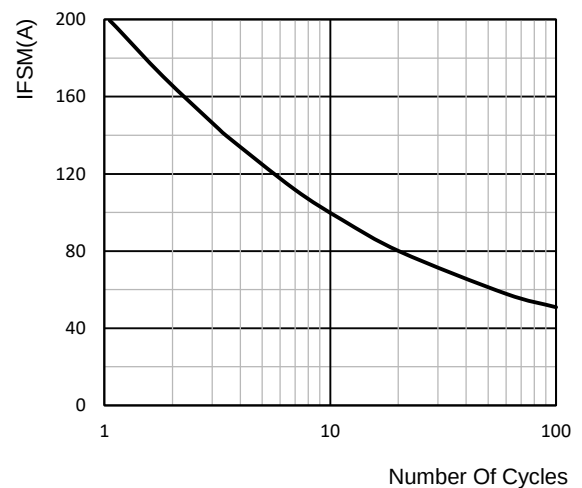
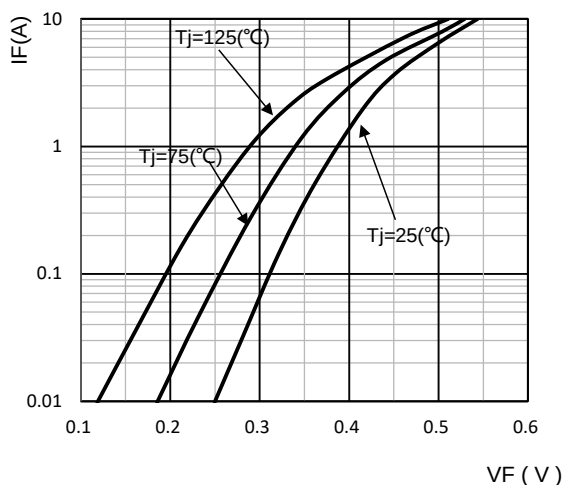


Fig.2 Maximum Non-Repetitive Forward Surge Current



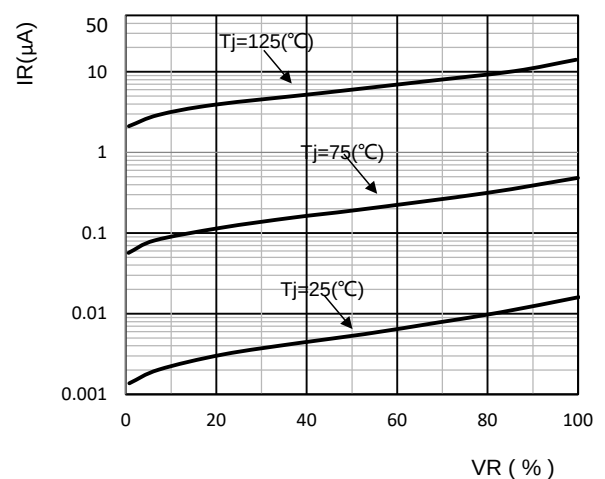
SK82-SK84

Fig.3 Typical Forward Characteristics



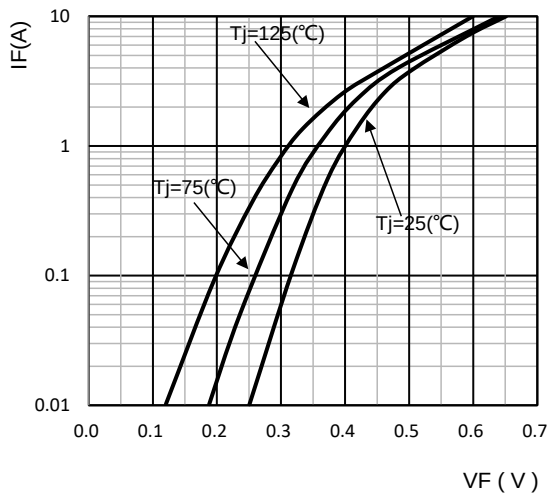
SK82-SK84

Fig.4 Typical Reverse Characteristics



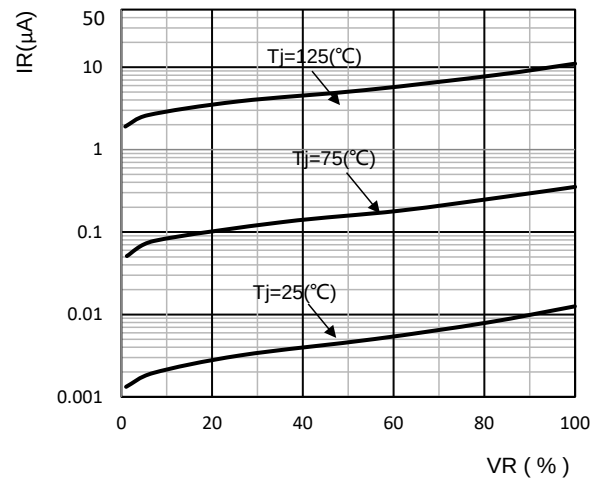
SK85-SK86

Fig.5 Typical Forward Characteristics



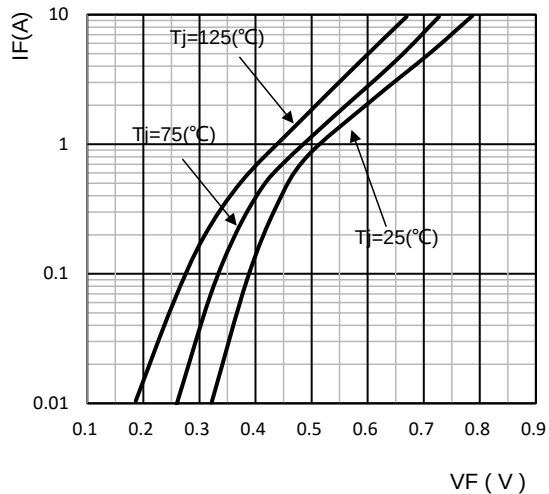
SK85-SK86

Fig.6 Typical Reverse Characteristics



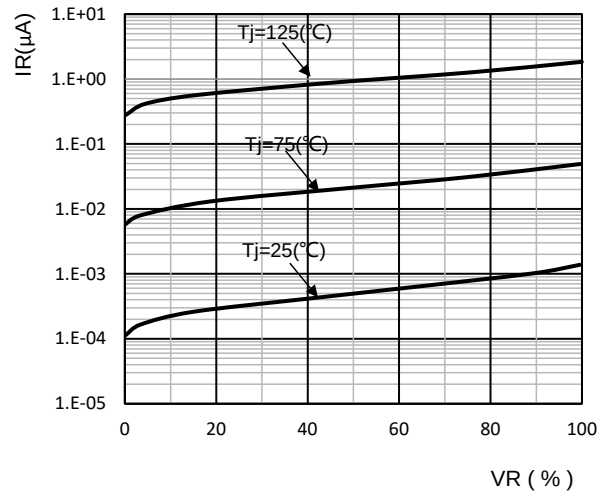
SK88-SK810

Fig.7 Typical Forward Characteristics



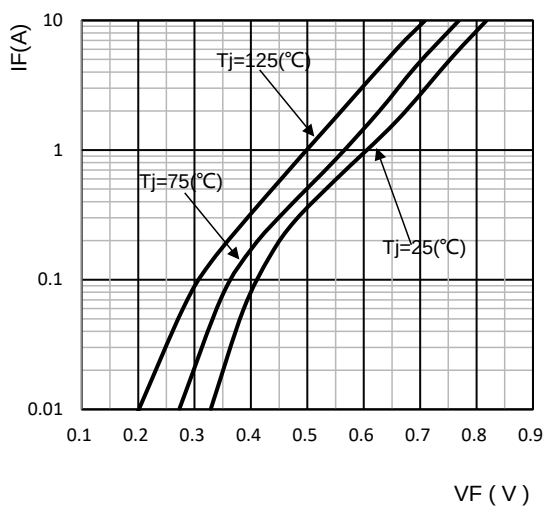
SK88-SK810

Fig.8 Typical Reverse Characteristics



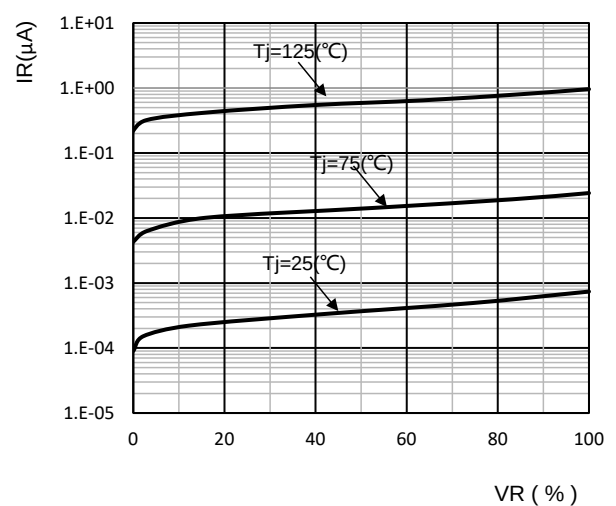
SK815

Fig.9 Typical Forward Characteristics



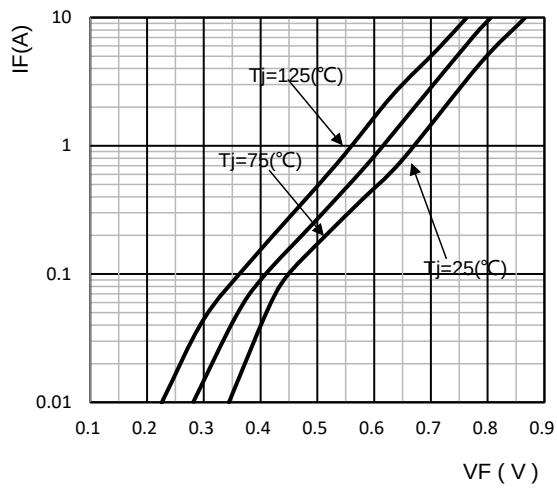
SK815

Fig.10 Typical Reverse Characteristics



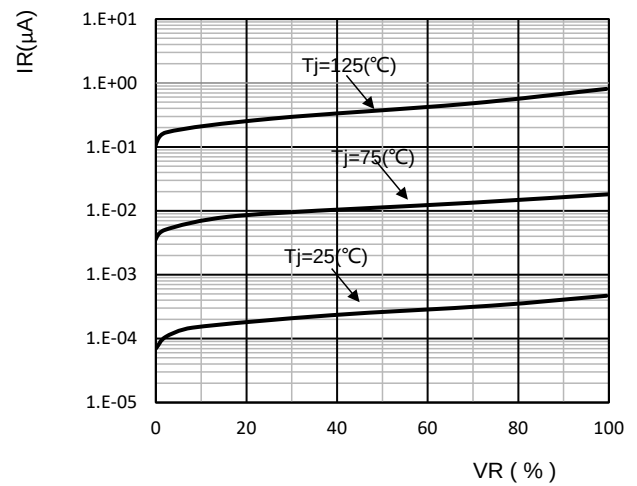
SK820

Fig.11 Typical Forward Characteristics



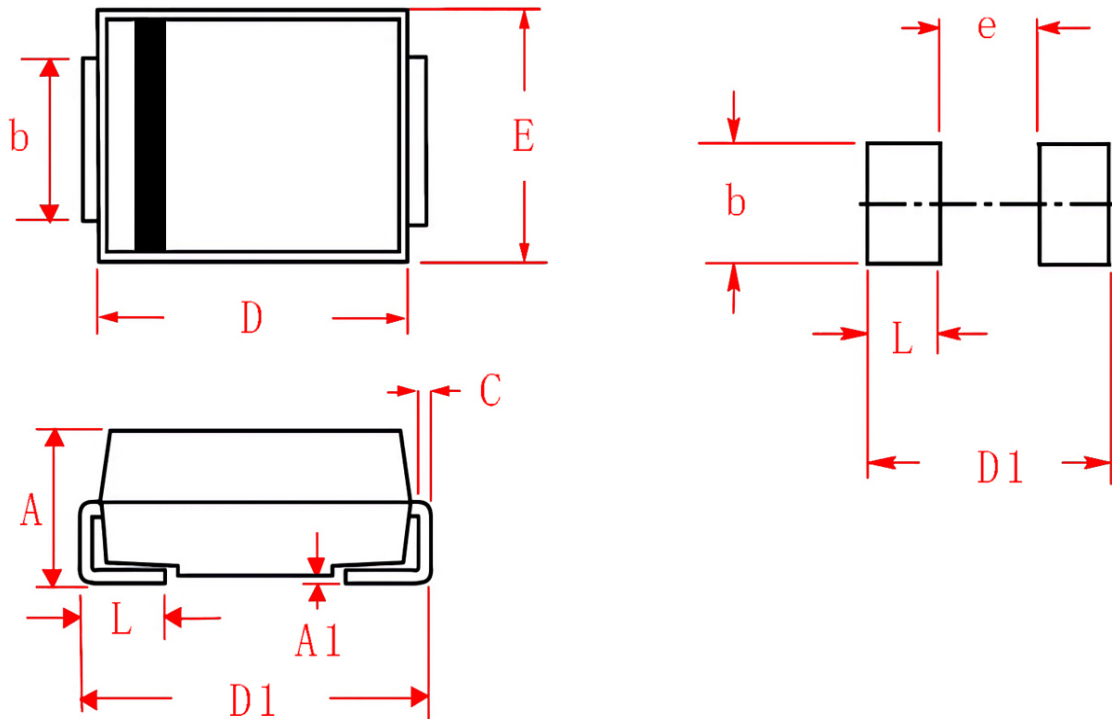
SK820

Fig.12 Typical Reverse Characteristics



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