

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- SK3X

X : From 2 To 20



SMC top view



Schematic diagram



Halogen-Free

Maximum Ratings($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Conditions	SK3									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
$I_{F(AV)}$	Average Forward Current	60Hz Half-sine wave Resistance load	3.0									A
I_{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	100									A
T_j	Junction Temperature		$-55\sim+150$									$^\circ\text{C}$
T_{stg}	Storage Temperature Range		$-55\sim+150$									$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Item	Symbol	Test Condition	SK3									Unit
			2	3	4	5	6	8	10	15	20	
Peak Forward Voltage	V _F	I _F =3.0A	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℃	10					0.5				
Thermal Resistance(Typical)	R _{θJ-A}	Between junction and ambient	90									℃/W
	R _{θJ-L}	Between junction and terminal	9									
Juction Capacitance (Typical)	C _j	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C	178			134		85		66	57	pF

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SK32	SMC	SK32	3,000	45,000	180,000	7"reel
SK33		SK33				
SK34		SK34				
SK35		SK35				
SK36		SK36				
SK38		SK38				
SK310		SK310				
SK315		SK315				
SK320		SK320				

Typical Characteristics

Fig.1 Forward Current Derating Curve

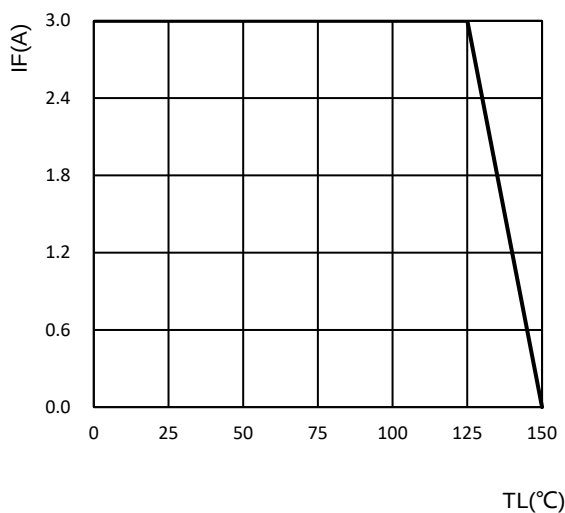
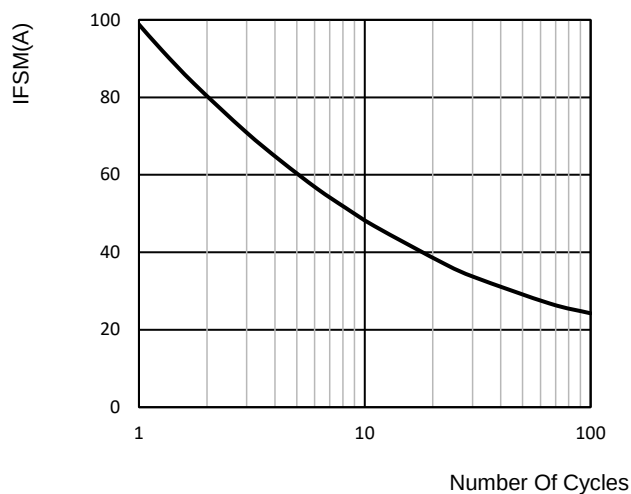
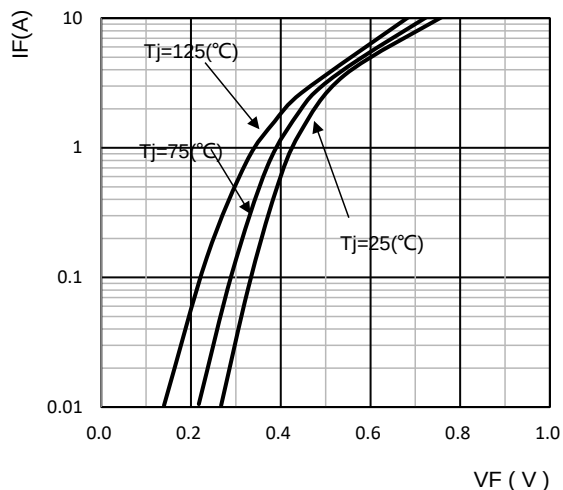


Fig.2 Maximum Non-Repetitive Forward Surge Current



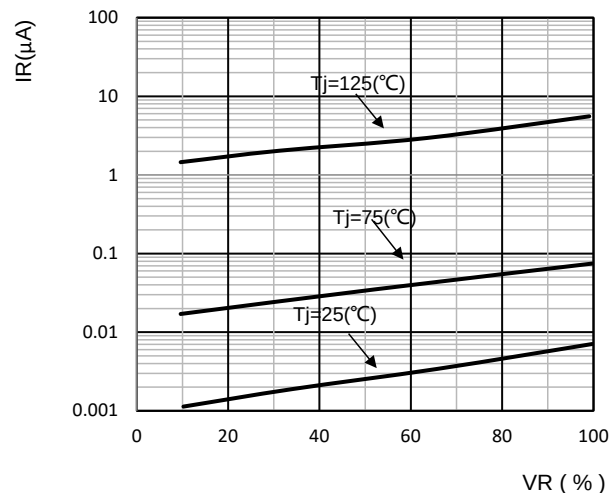
SK32-SK34

Fig.3 Typical Forward Characteristics



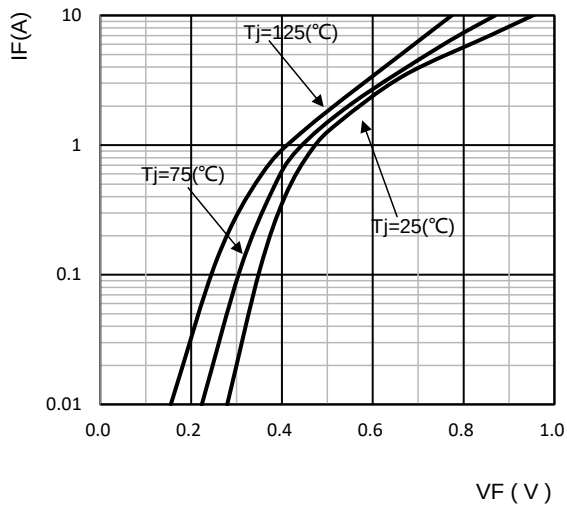
SK32-SK34

Fig.4 Typical Reverse Characteristics



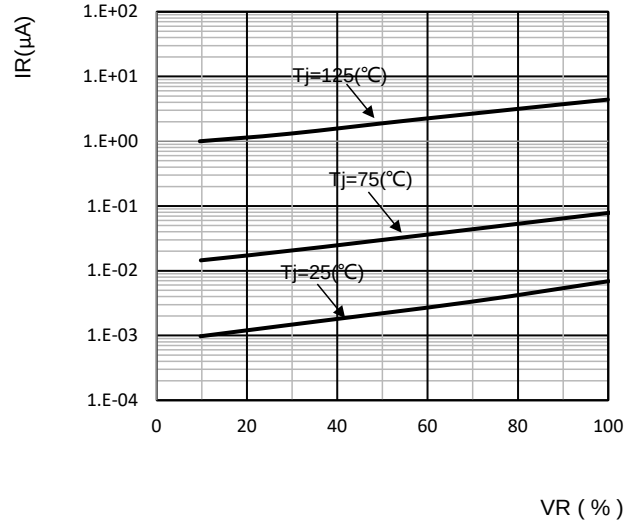
SK35-SK36

Fig.5 Typical Forward Characteristics



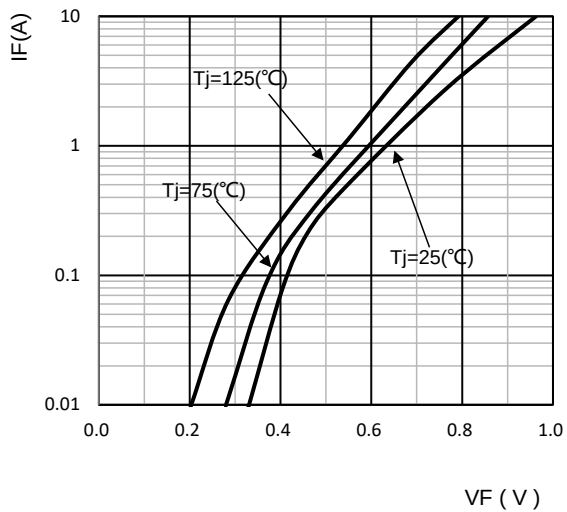
SK35-SK36

Fig.6 Typical Reverse Characteristics



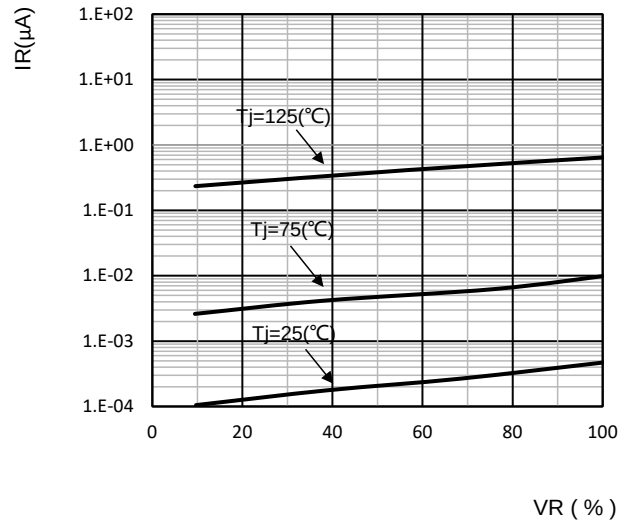
SK38-SK310

Fig.7 Typical Forward Characteristics



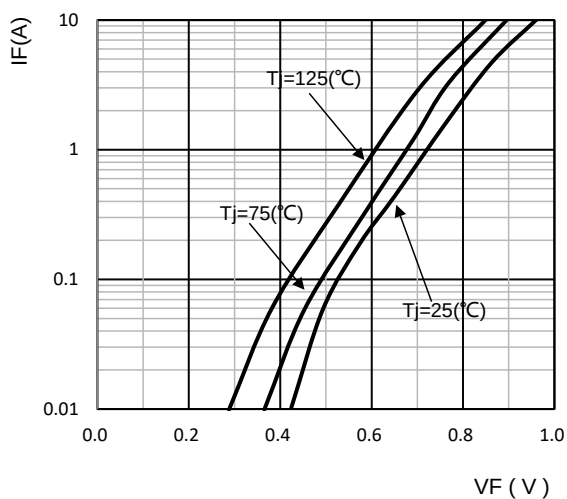
SK38-SK310

Fig.8 Typical Reverse Characteristics



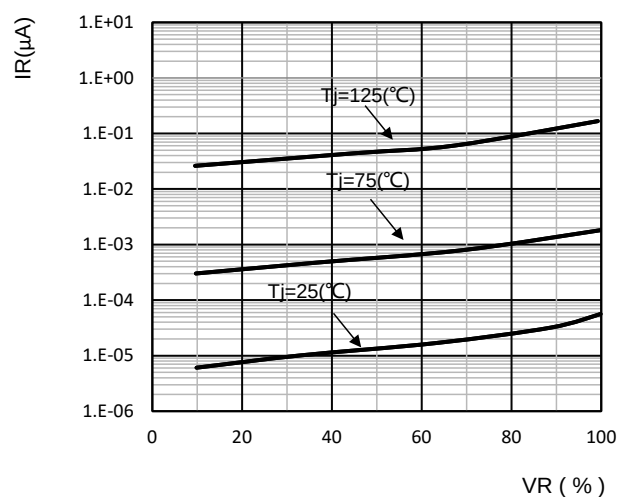
SK315

Fig.9 Typical Forward Characteristics



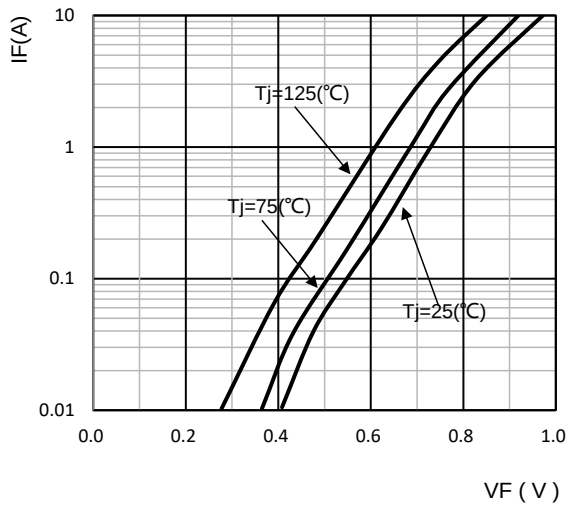
SK315

Fig.10 Typical Reverse Characteristics



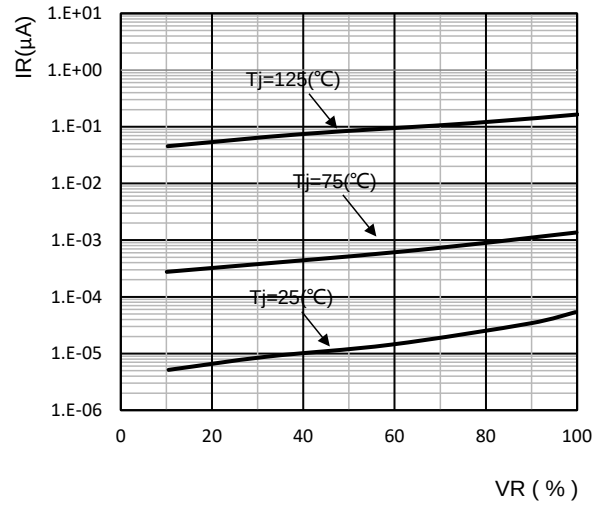
SK320

Fig.11 Typical Forward Characteristics



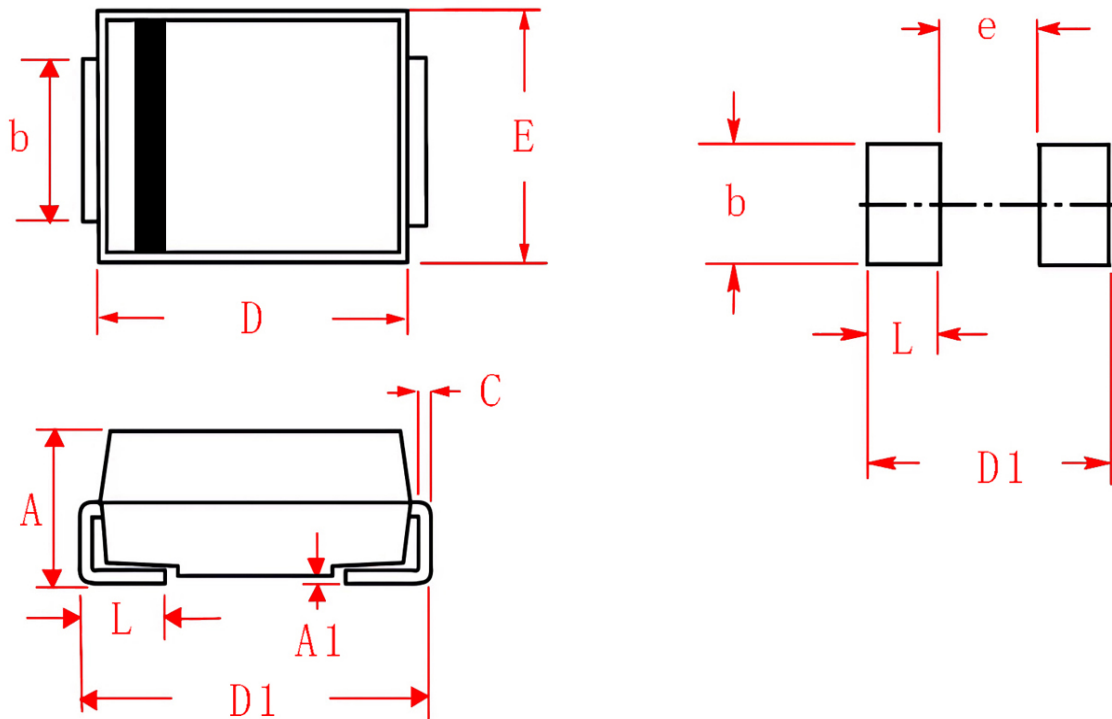
SK320

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