

Features

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

SMC



Marking:SK3X

X : 2 To 20

Applications

Rectifier

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SK3								
				2	3	4	5	6	8	10	15	20
Repetitive Peak Reverse Voltage	V _{RRM}	V		20	30	40	50	60	80	100	150	200
Maximum RMS Voltage	V _{RMS}	V		14	21	28	35	42	56	70	105	140
Average Forward Current	I _{F(AV)}	A	60Hz Half-sine wave , Resistance load	3.0								
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave , 1 CYCle, Ta=25℃	100								
Junction Temperature	T _J	℃		-55~+150								
Storage Temperature	T _{STG}	℃		-55 ~ +150								

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

Item	Symbol	Unit	Test Condition		SK3								
					2	3	4	5	6	8	10	15	20
Peak Forward Voltage	V _F	V	I _F =3.0A		0.55			0.7		0.85		0.95	
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25℃	0.5				0.1				
	T _a =100℃			10				5.0					
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		90								
	R _{θJ-L}		Between junction and terminal		9								
Juction Capacitance (Typical)	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		178			134		85		66	57

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on 1" x 1"(25.4mm x 25.4mm) FR4 PCB, double sided copper, with minimum pad layout

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

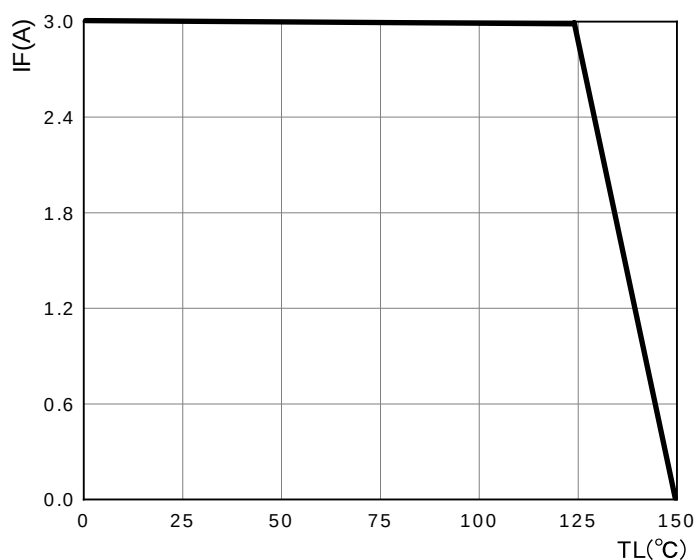
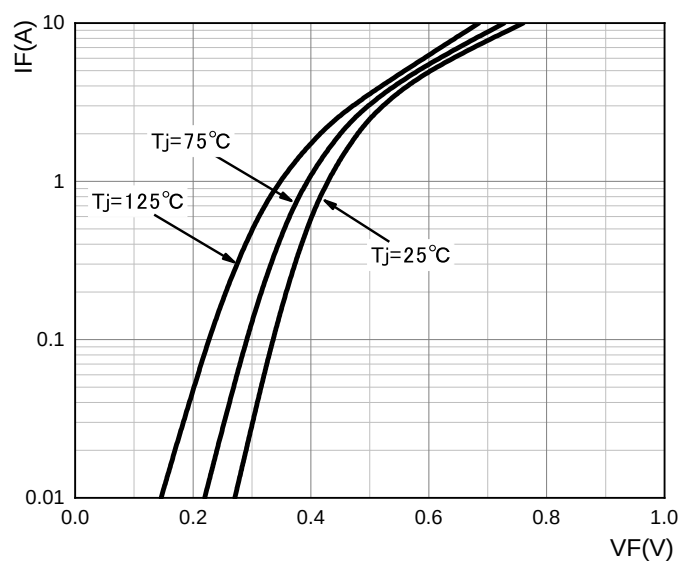


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



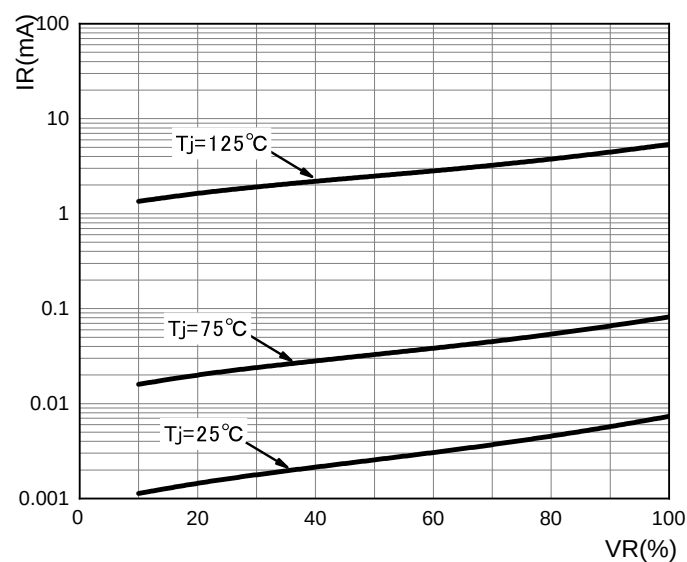
SK32-SK34

FIG.3: TYPICAL FORWARD CHARACTERISTICS



SK32-SK34

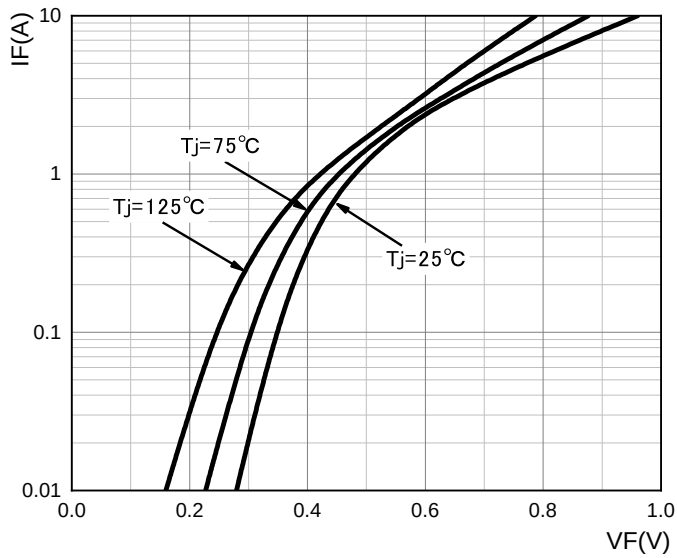
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

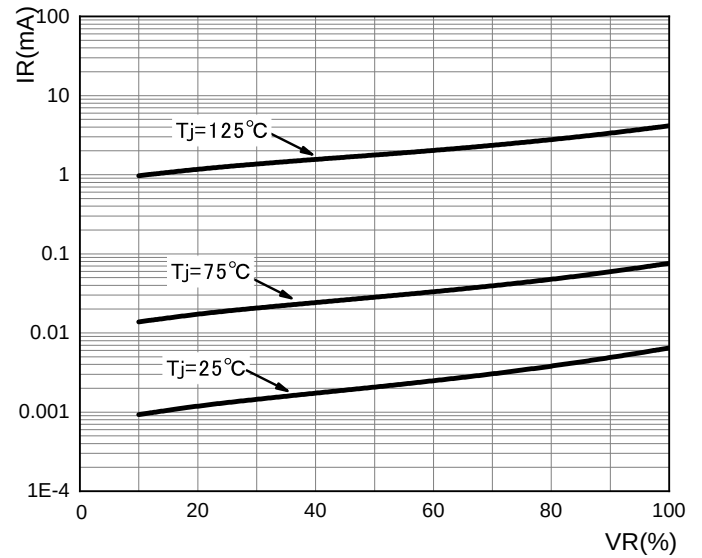
SK35-SK36

FIG.5: TYPICAL FORWARD CHARACTERISTICS



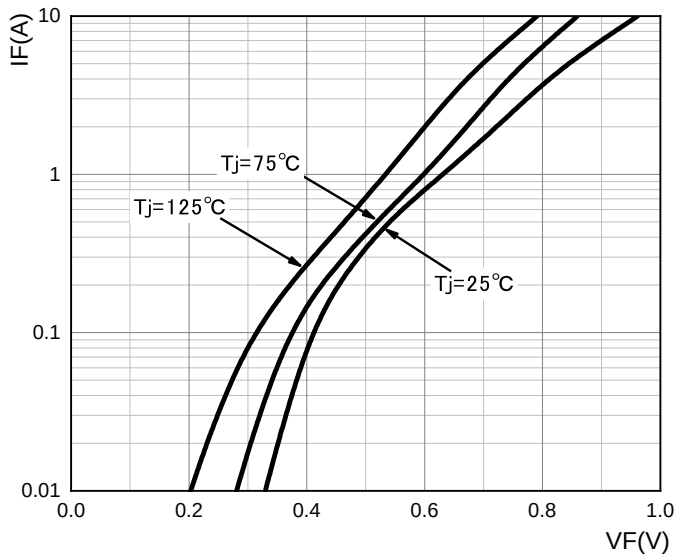
SK35-SK36

FIG.6: TYPICAL REVERSE CHARACTERISTICS



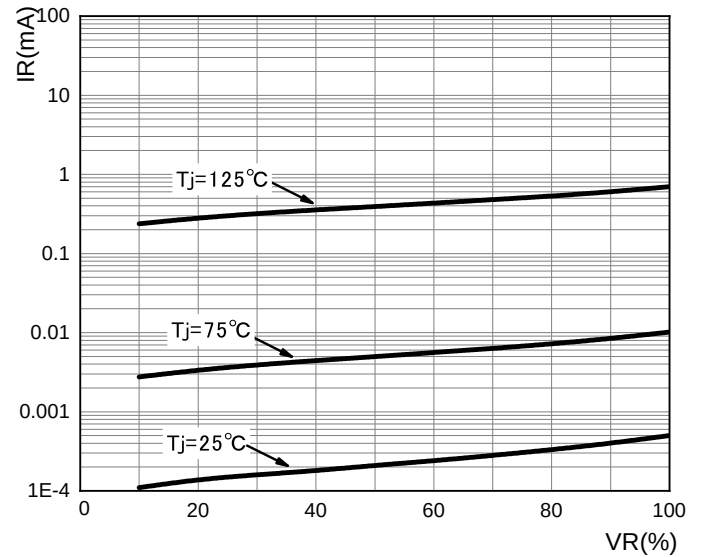
SK38-SK310

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SK38-SK310

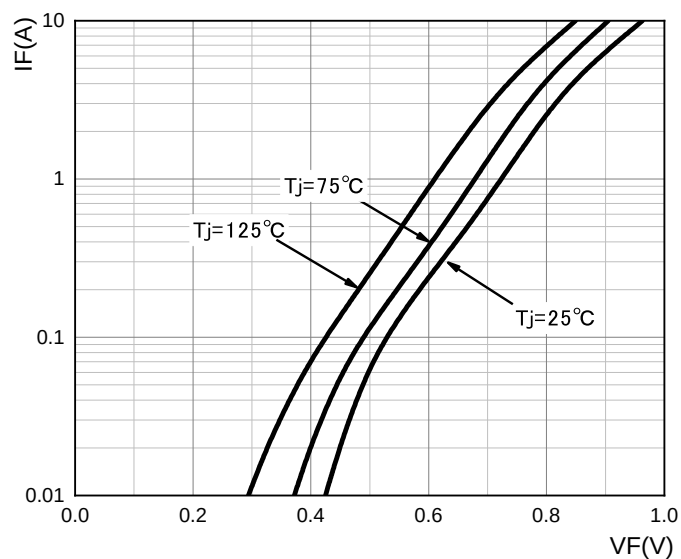
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

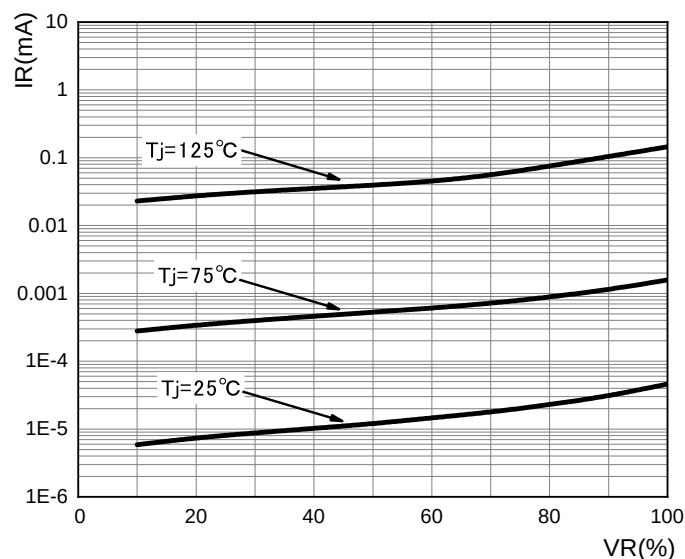
SK315

FIG.9: TYPICAL FORWARD CHARACTERISTICS



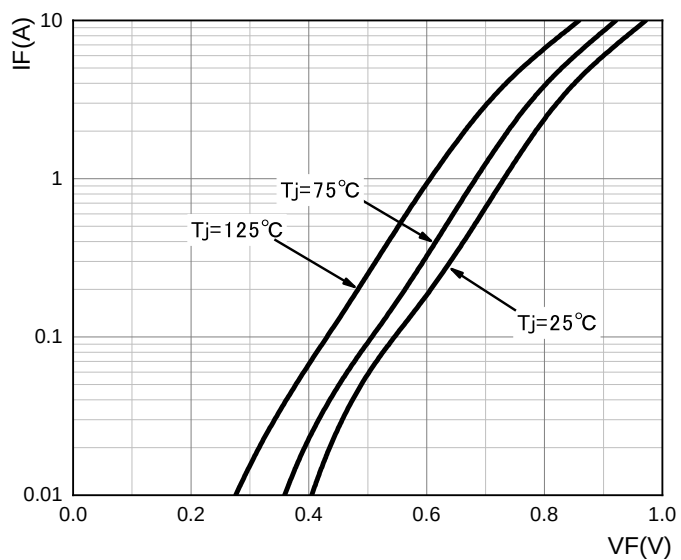
SK315

FIG.10: TYPICAL REVERSE CHARACTERISTICS



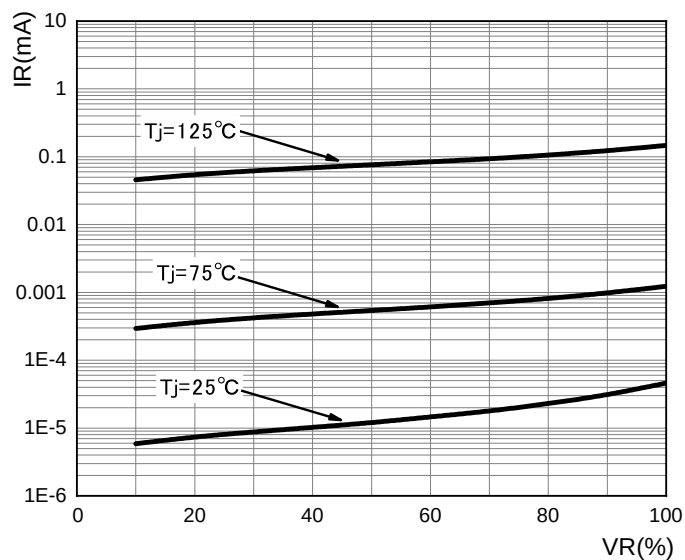
SK320

FIG.11: TYPICAL FORWARD CHARACTERISTICS

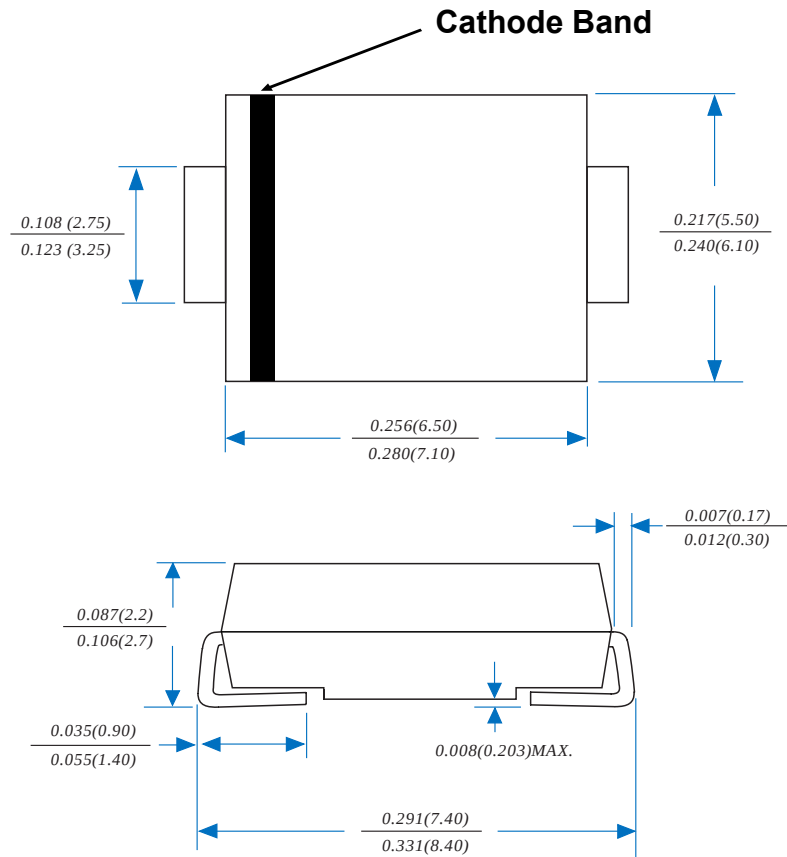


SK320

FIG.12: TYPICAL REVERSE CHARACTERISTICS

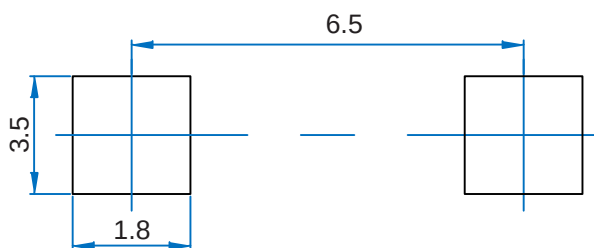


SMC Package Outline Dimensions



Dimensions in inches and (millimeters)

SMC Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.