

Features

$I_{F(AV)}$ 2A
 V_{RRM} 20V-200V

High surge current capability

Polarity: Color band denotes cathode

Applications

Rectifier

SMB



Marking:SK2X

X : 2 To 20

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SK2								
				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	2.0								
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz Half-sine wave , 1 cycle, Ta=25℃	50								
Junction Temperature	T _J	℃		-55~+125			-55~+150					
Storage Temperature	T _{STG}	℃		-55 ~ +150								

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

Item	Symbol	Unit	Test Condition		SK2							
					2	3	4	5	6	8	10	15
Peak Forward Voltage	V _F	V	I _F =2.0A		0.55		0.70		0.85		0.95	
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	Ta=25℃	0.5				0.1			
	Ta=100℃			10				5.0				
Thermal Resistance	R _{θJ-A}	℃/W	Between junction and ambient		72							
	R _{θJ-L}		Between junction and terminal		18							
Juction Capacitance (Typical)	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		114		92		53		40	

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on FR4 PCB double sided copper mini pad

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

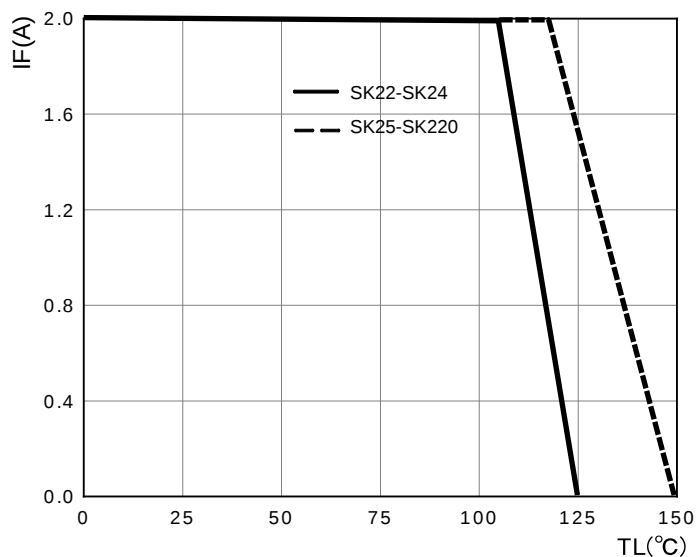
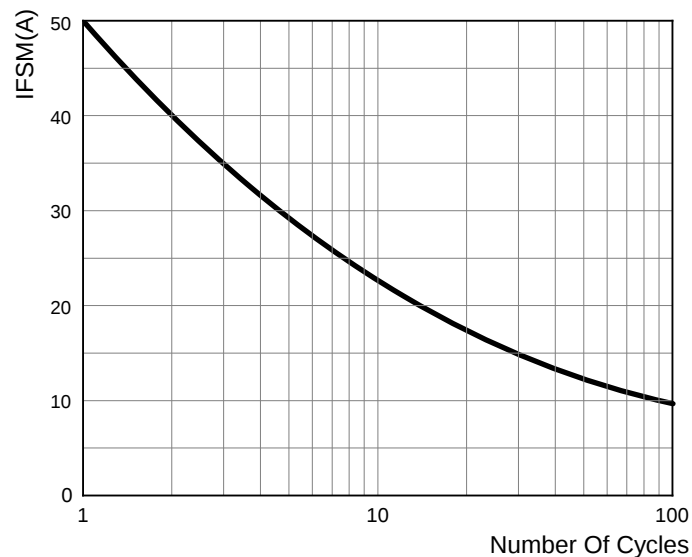
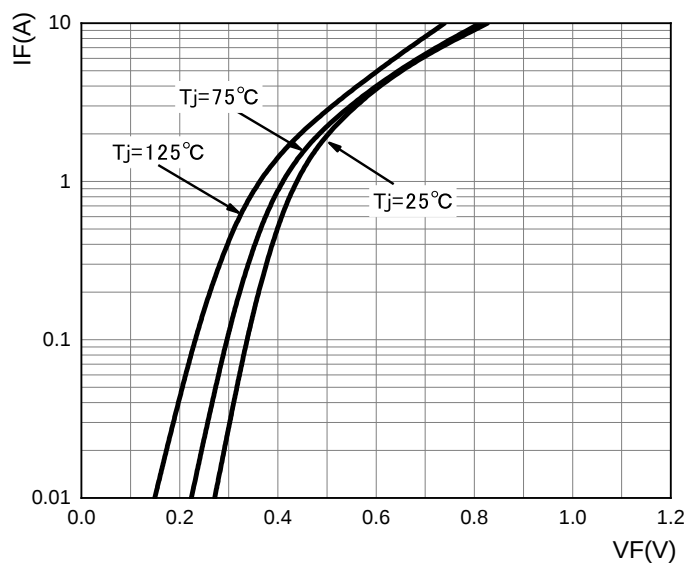


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



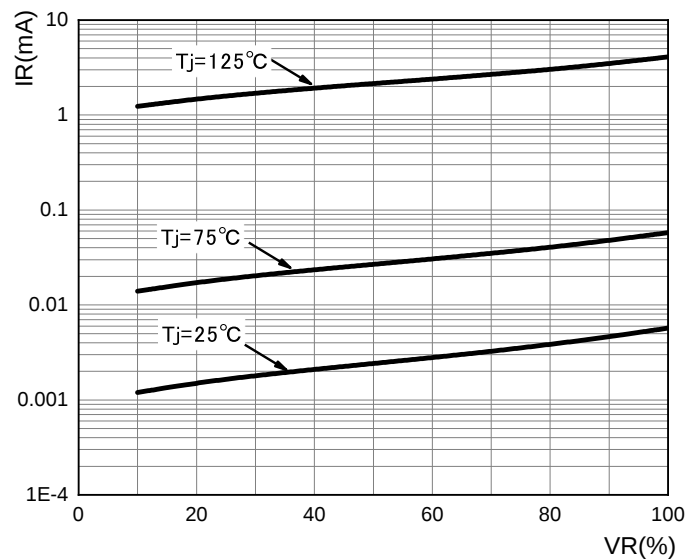
SK22-SK24

FIG.3: TYPICAL FORWARD CHARACTERISTICS



SK22-SK24

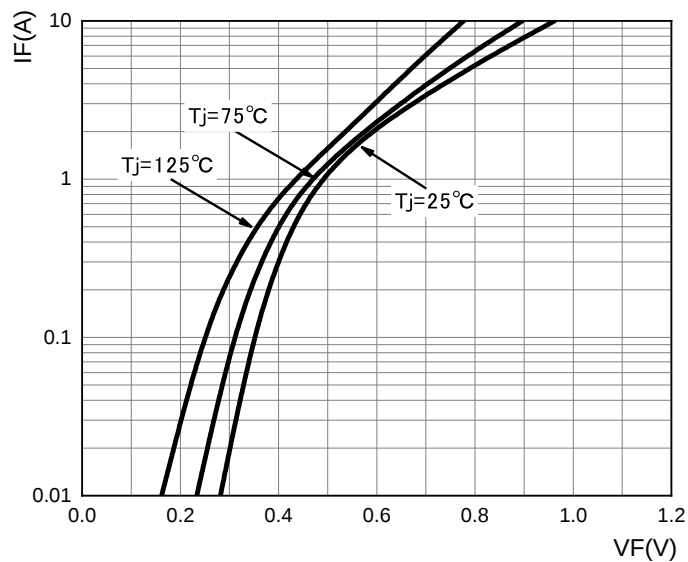
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

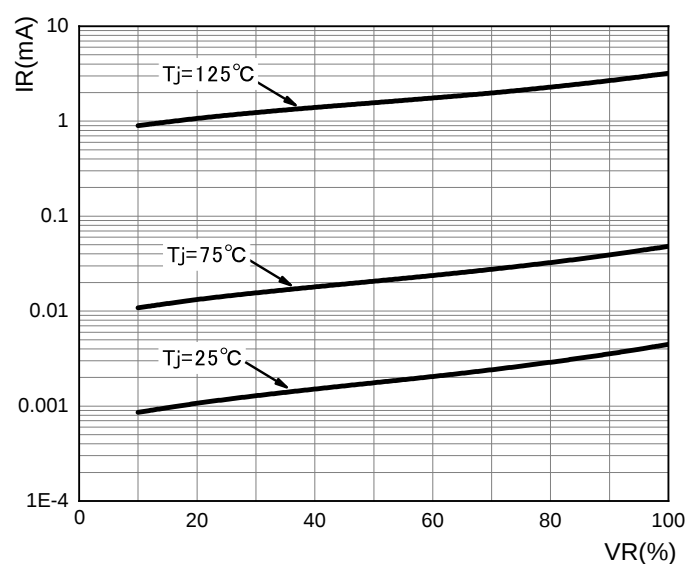
SK25-SK26

FIG.5: TYPICAL FORWARD CHARACTERISTICS



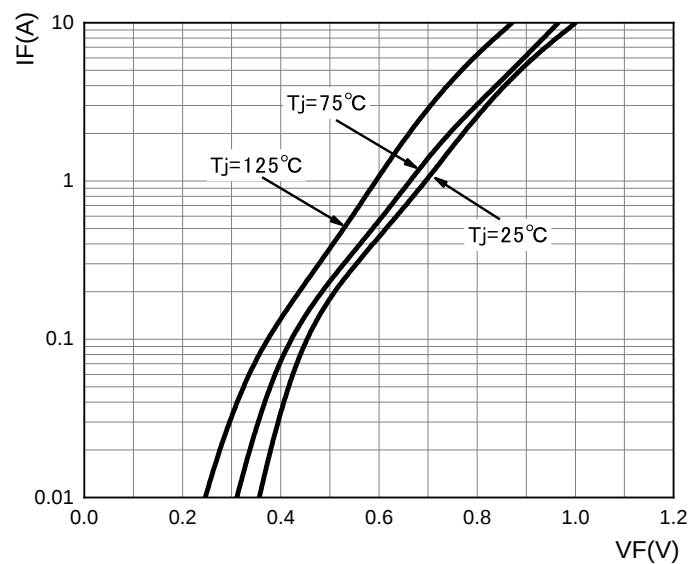
SK25-SK26

FIG.6: TYPICAL REVERSE CHARACTERISTICS



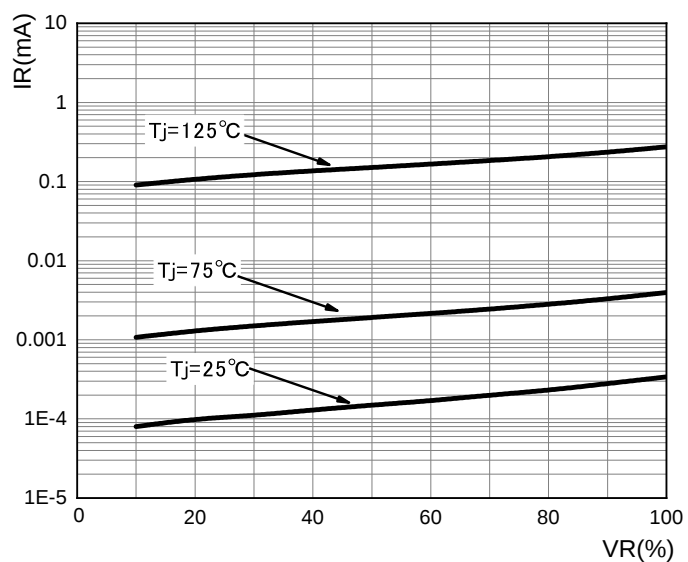
SK28-SK210

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SK28-SK210

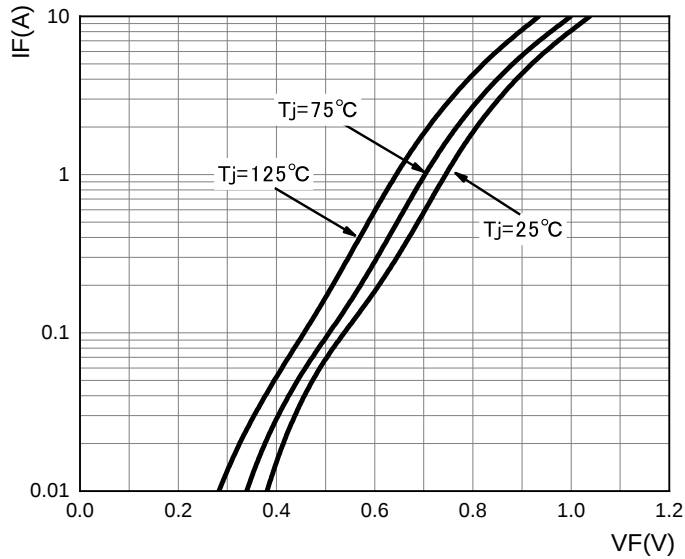
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

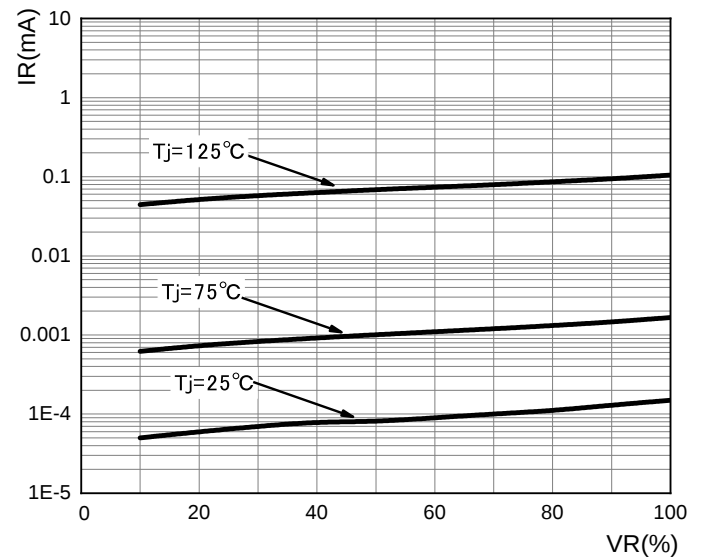
SK215

FIG.9: TYPICAL FORWARD CHARACTERISTICS



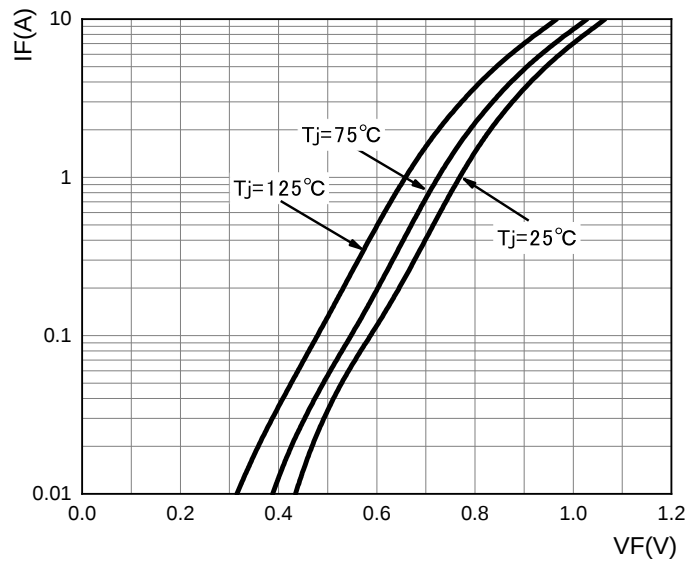
SK215

FIG.10: TYPICAL REVERSE CHARACTERISTICS



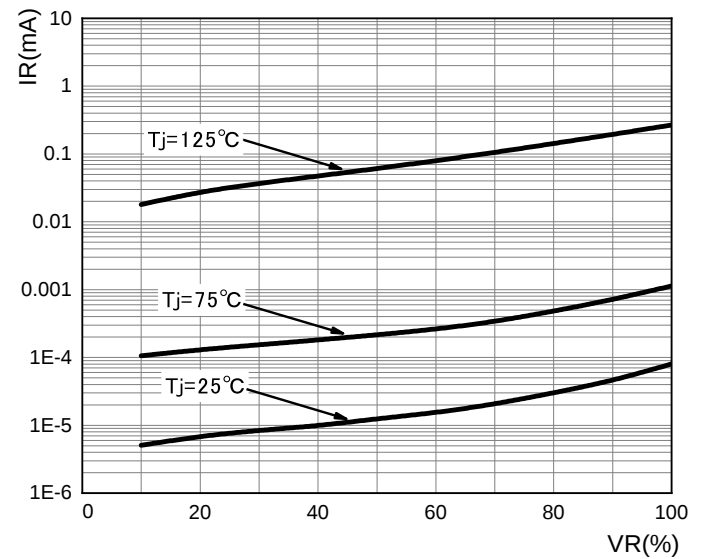
SK220

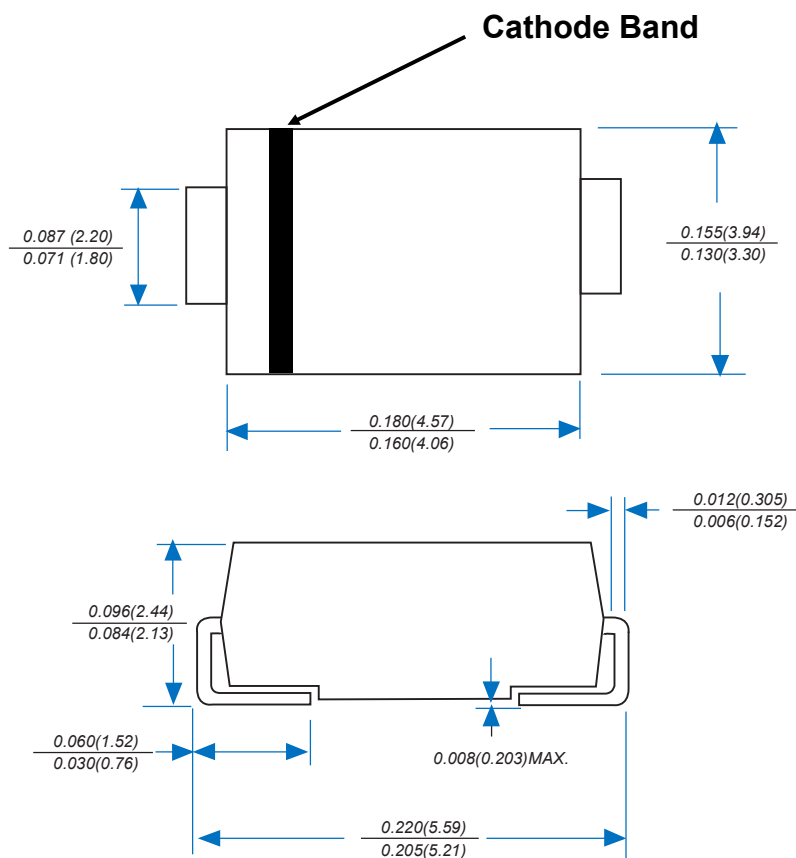
FIG.11: TYPICAL FORWARD CHARACTERISTICS



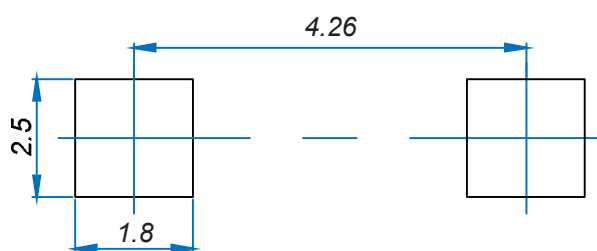
SK220

FIG.12: TYPICAL REVERSE CHARACTERISTICS



SMB Package outline Dimensions


Dimensions in inches and (millimeters)

SMB Suggested pad Layout

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05 \text{ mm}$.
3. The pad layout is for reference purposes only.