

SMB Plastic-Encapsulate Diodes

Features:

- $I_{F(AV)}$ 2A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications:

- Rectifier

Marking

- SS2X / SK2X

X : From 2L To 20L

SMB



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SK2														
				2L	3L	4L	5L	6L	8L	10L	15L	20L						
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-sinewave, Resistance load	2.0														
Surge(Non-repetitive) Forward Current	I_{FSM}	A	60Hz Half-sinewave, 1 cycle, $T_a=25^{\circ}C$	50														
Junction Temperature	T_J	$^{\circ}C$		-55 ~ +150														
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150														

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

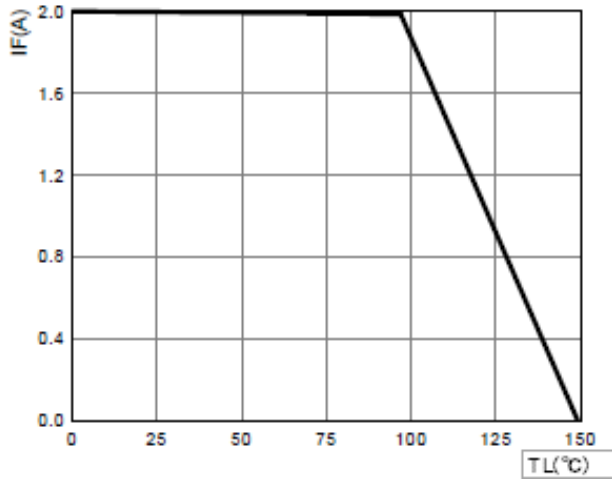
Item	Symbol	Unit	Test Condition	SK2															
				2L	3L	4L	5L	6L	8L	10L	15L	20L							
Peak Forward Voltage	V_F	V	$I_F=2.0A$	0.45		0.55		0.72		0.82									
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$										0.1					
	I_{RRM2}			$T_a=100^{\circ}C$										5.0					
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}C$	Between junction and ambient	88															
	$R_{\theta J-L}$	/ W	Between junction and terminal	28															
Junction Capacitance (Typical)	C_j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	114															

Notes:

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

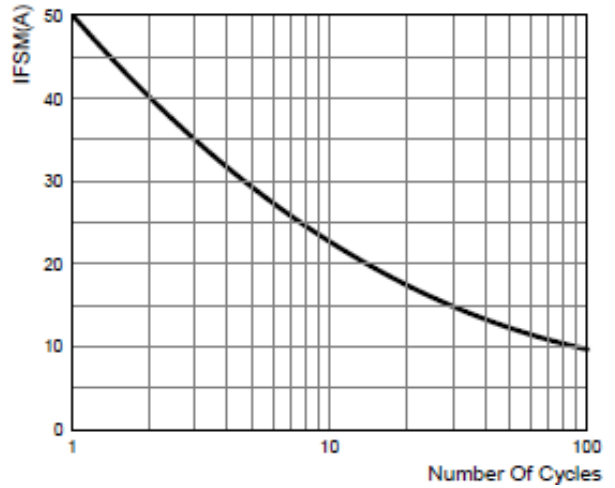
Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE



SK22L-SK24L

FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



SK22L-SK24L

FIG.3: TYPICAL FORWARD CHARACTERISTICS

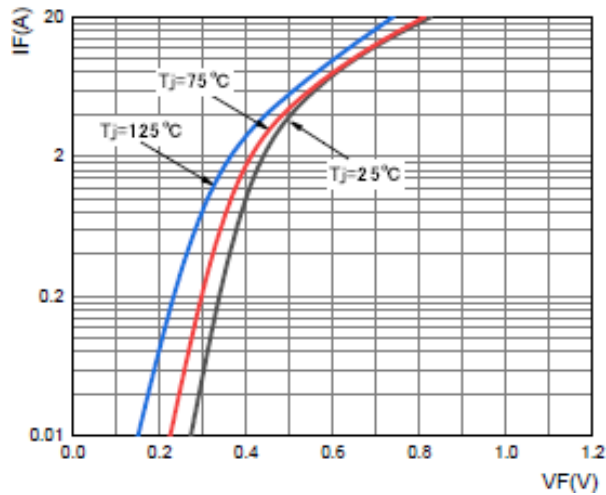
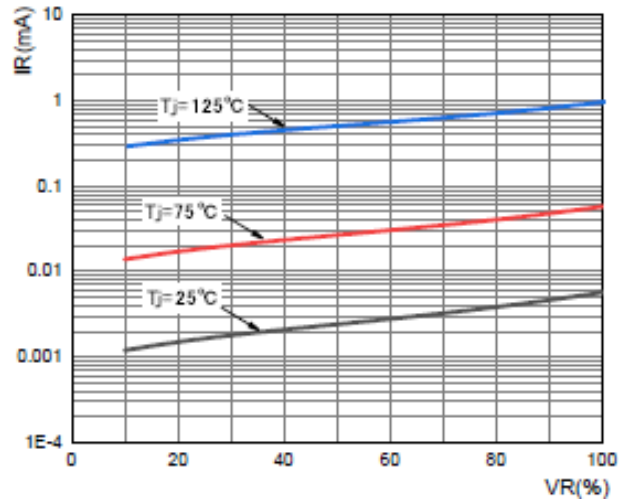
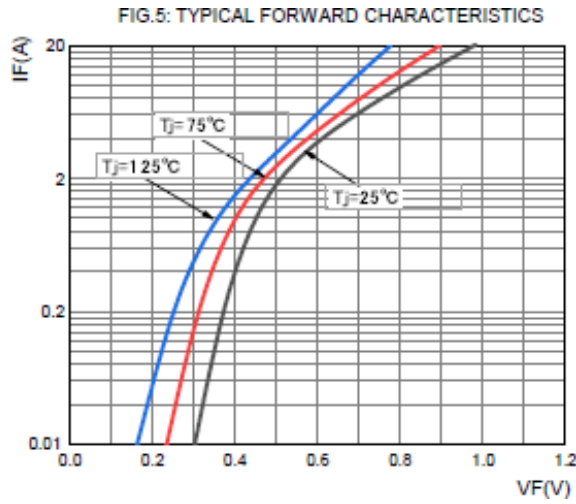


FIG.4: TYPICAL REVERSE CHARACTERISTICS

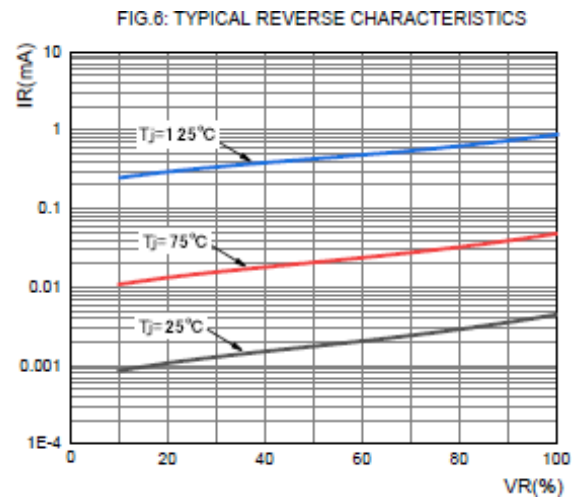


Typical Characteristics

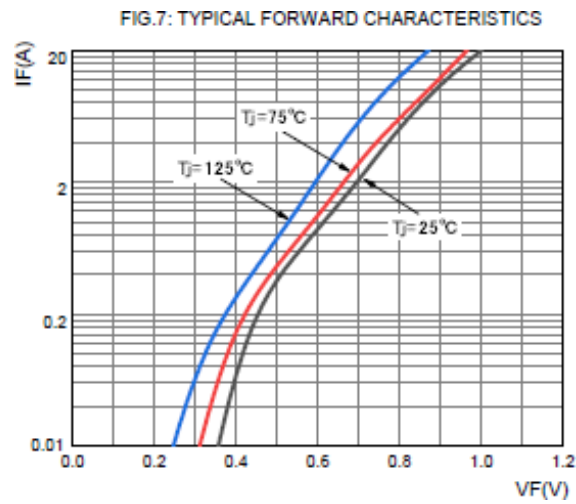
SK25L-SK26L



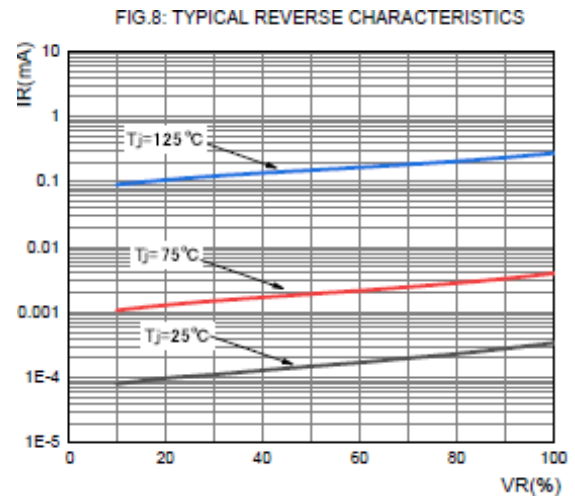
SK25L-SK26L



SK28L-SK210L

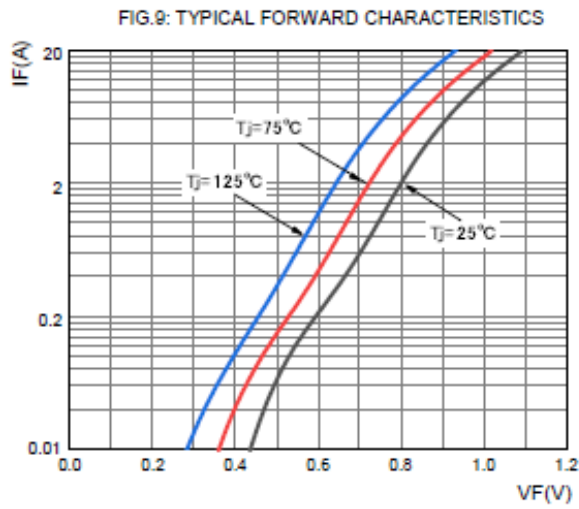


SK28L-SK210L

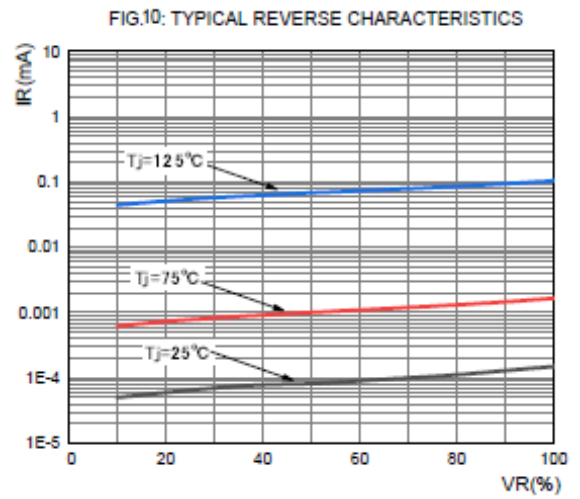


Typical Characteristics

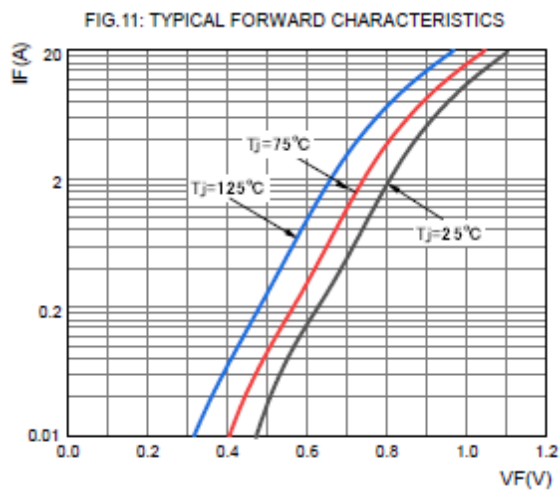
SK215L



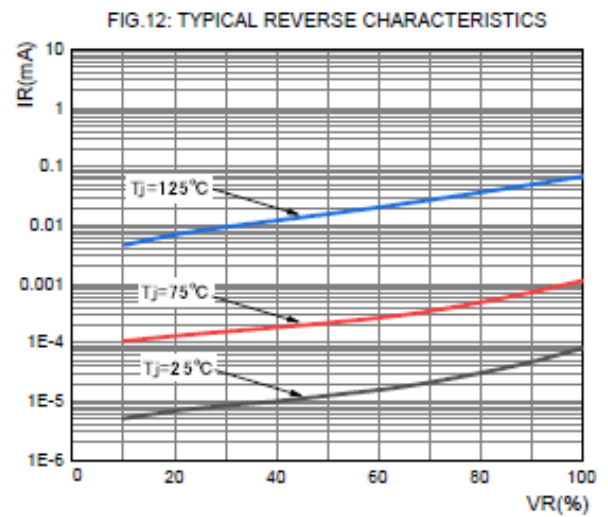
SK215L



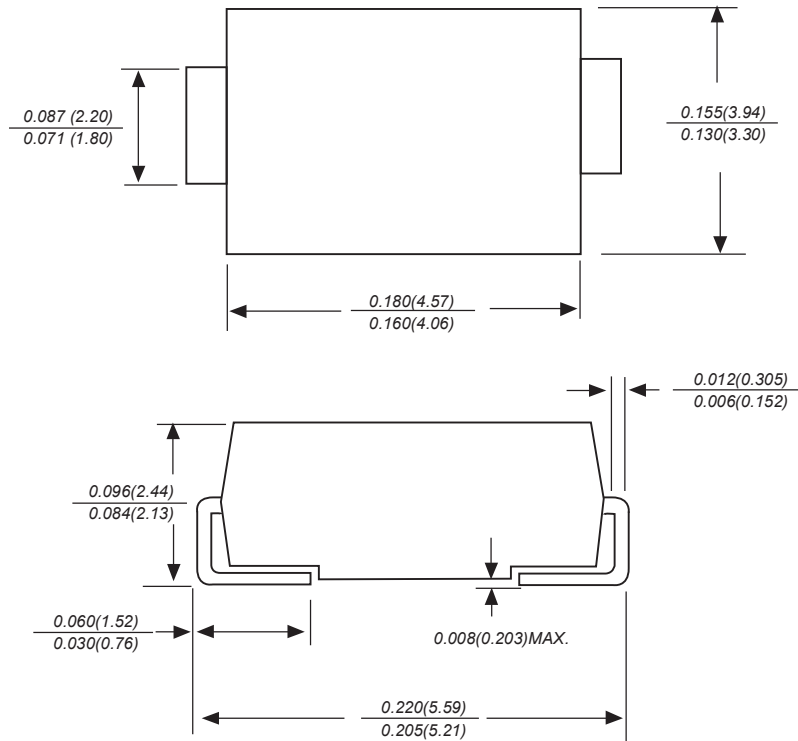
SK220L



SK220L

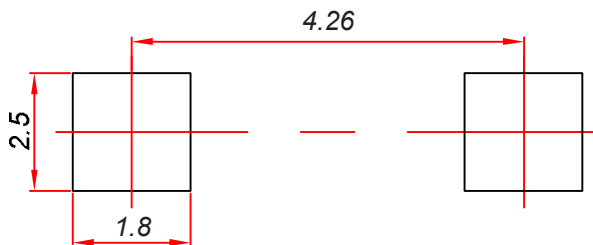


SMB Package Outline Dimensions



Dimensions in inches and (millimeters)

SMB Suggested Pad Layout



Note:

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

Reel Taping Specifications For Surface Mount Devices-SMB

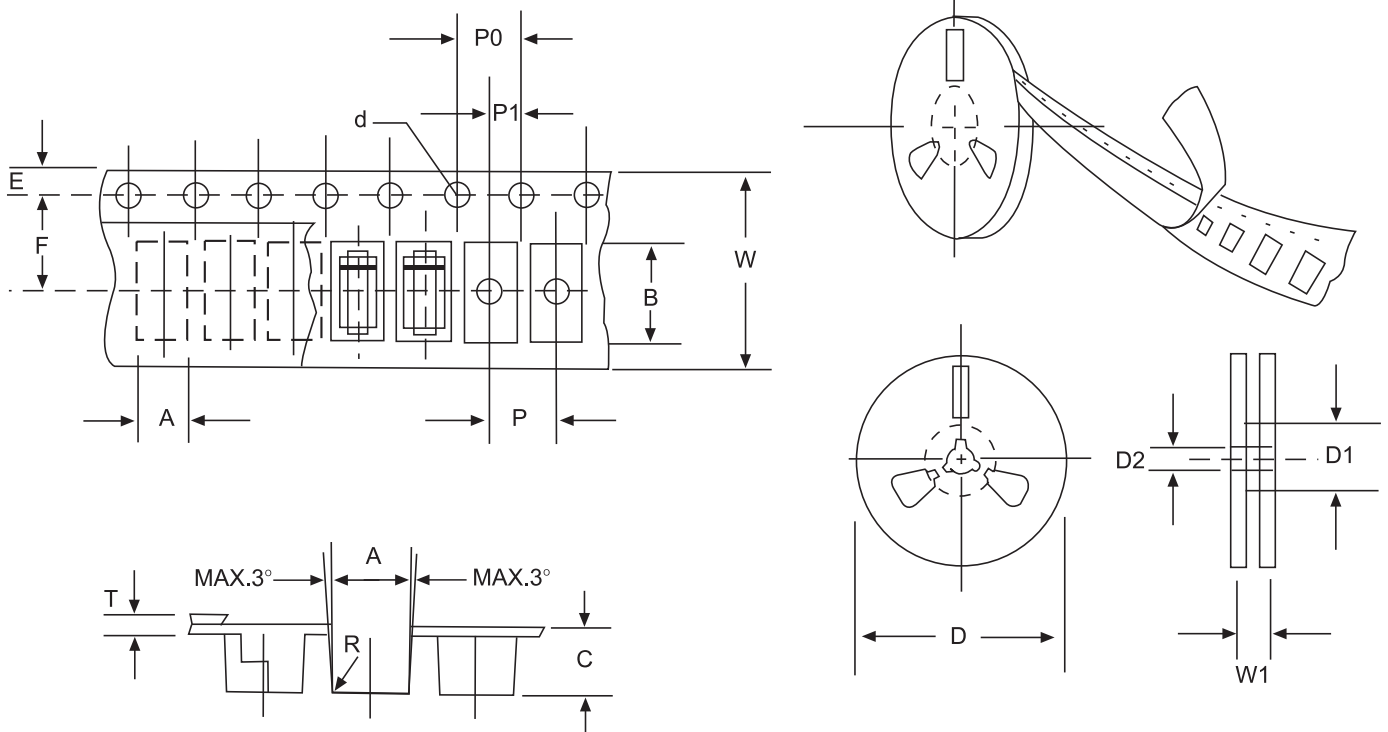


FIG: CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SMBG mm(inch)
Carrier width	A	4.09±0.1(0.161±0.004)
Carrier length	B	5.82±0.1(0.229±0.004)
Carrier depth	C	2.50±0.1(0.100±0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	330±2.0(13±0.079)
Reel inner diameter	D1	75 ±1.0 (2.95 ±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Stroctet hole position	E	1.75 ±0.1(0.069±0.004)
Punch hole position	F	5.65±0.05(0.222±0.002)
Punch hole pitch	P	8.0±0.1(0.315±0.004)
Sprocket hole pitch	P0	4.0±0.1(0.157±0.004)
Embossment center	P1	2.0±0.1(0.079±0.004)
Total tape thickness	T	0.32±0.1(0.013±0.004)
Tape width	W	12.0±0.2(0.472±0.008)
Reel width	W1	16.8±2.0(0.661±0.079)

NOTE: Devices are packed in accordance with EIA standard RS-481-A and specification given above.