

## SMA Plastic-Encapsulate Diodes

### Schottky Rectifier Diodes

#### Features:

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

#### Applications:

- Rectifier

#### Marking

- SS2X  
X : From 2 To 20
- SK2X  
X : From 2 To 20

SMA



#### 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-sine wave , Resistance load , $T_a=100^{\circ}C$	2.0									
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz Half-sine wave , 1 cycle , $T_a=25^{\circ}C$	60									
Junction Temperature	$T_J$	$^{\circ}C$		-55~+150									
Storage Temperature	$T_{STG}$	$^{\circ}C$		-55 ~+150									

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

Item	Symbol	Unit	Test Condition	SS2							
				2L	3L	4L	5L	6L	8L	10L	15L
Peak Forward Voltage	$V_F$	V	$I_F=2.0A$	0.45		0.55		0.72		0.82	
Peak Reverse Current	$I_{RRM1}$	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$							
	$I_{RRM2}$			$T_a=100^{\circ}C$							
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}C / W$	Between junction and ambient				88				
	$R_{\theta J-L}$		Between junction and terminal				28				
Juction 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

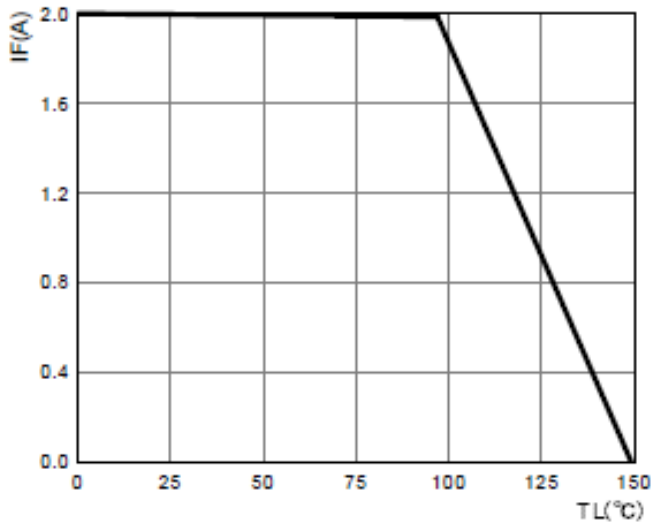
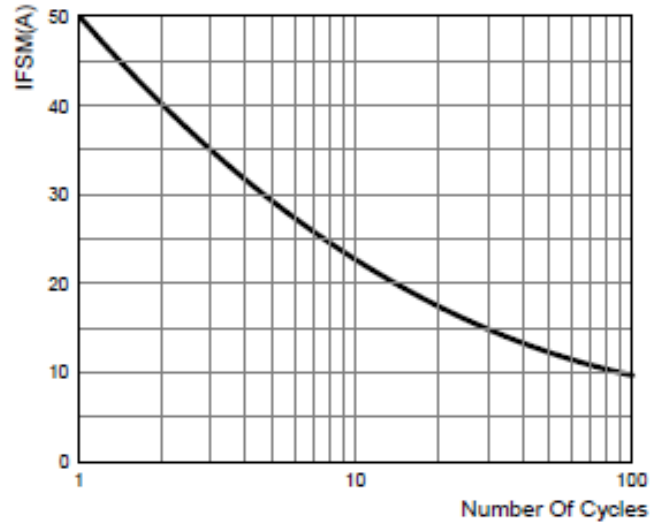
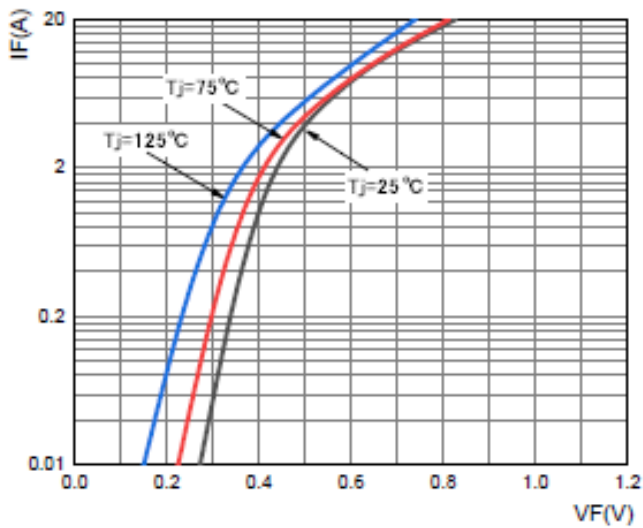


FIG. 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



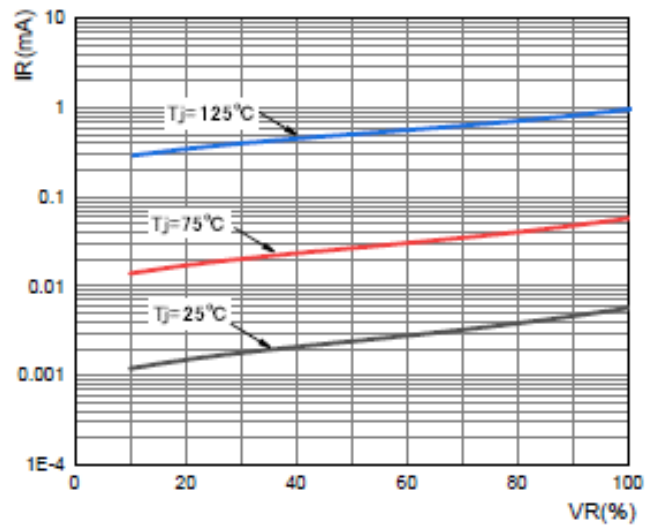
SK22L-SK24L

FIG. 3: TYPICAL FORWARD CHARACTERISTICS



SK22L-SK24L

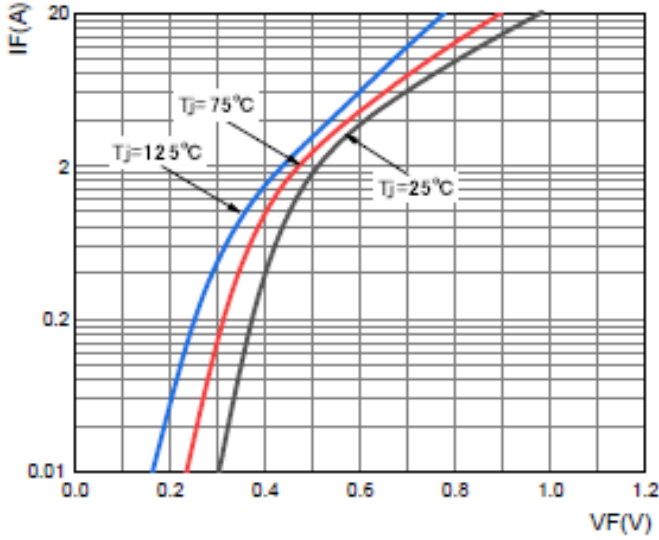
FIG. 4: TYPICAL REVERSE CHARACTERISTICS



### Typical Characteristics

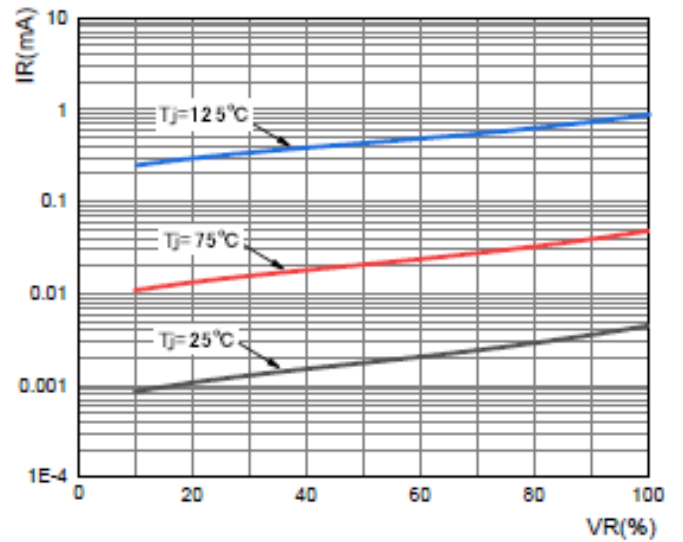
SK25L-SK26L

FIG.5: TYPICAL FORWARD CHARACTERISTICS



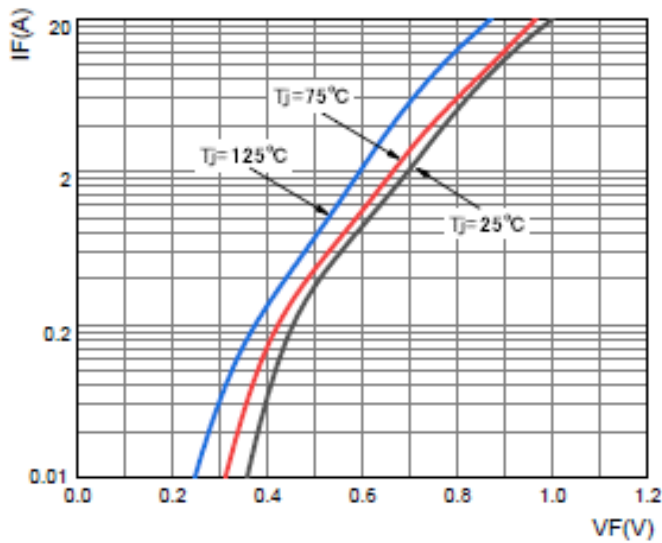
SK25L-SK26L

FIG.6: TYPICAL REVERSE CHARACTERISTICS



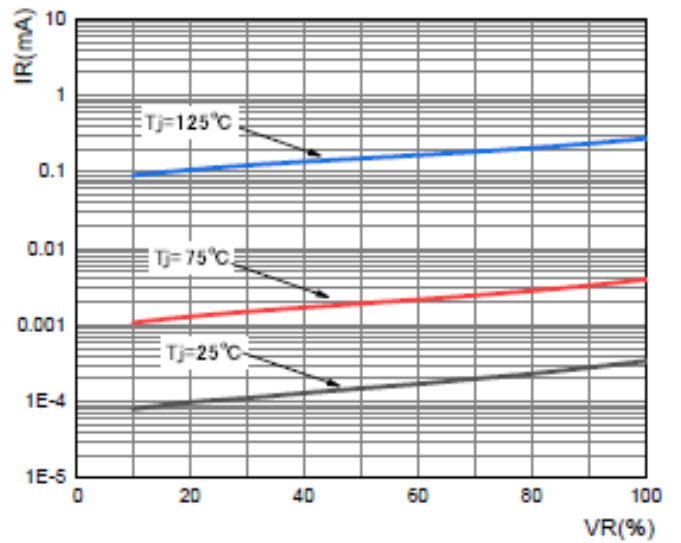
SK28L-SK210L

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SK28L-SK210L

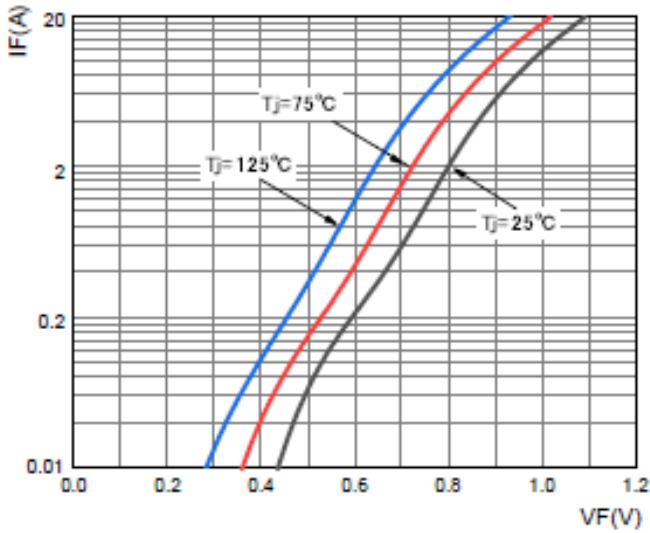
FIG.8: TYPICAL REVERSE CHARACTERISTICS



### Typical Characteristics

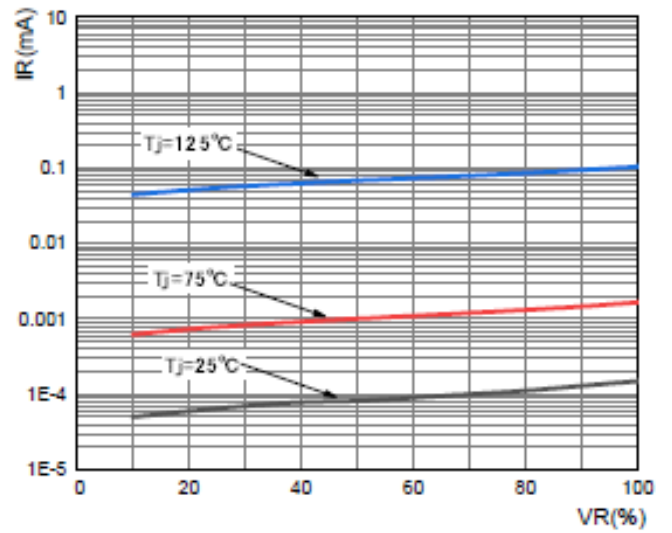
SK215L

FIG.9: TYPICAL FORWARD CHARACTERISTICS



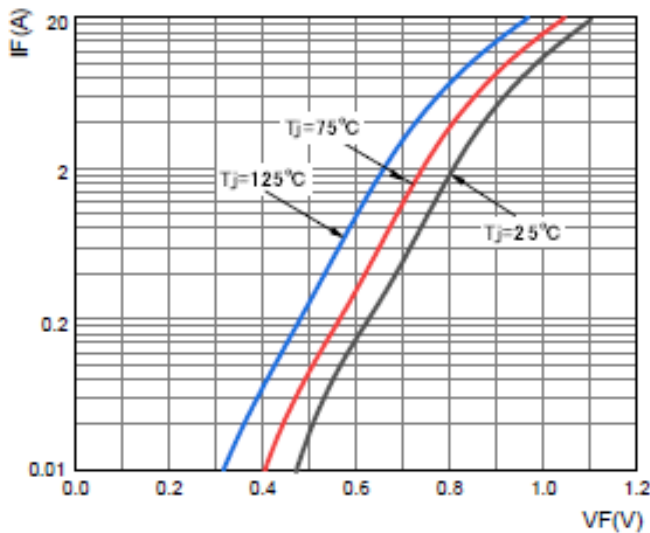
SK215L

FIG.10: TYPICAL REVERSE CHARACTERISTICS



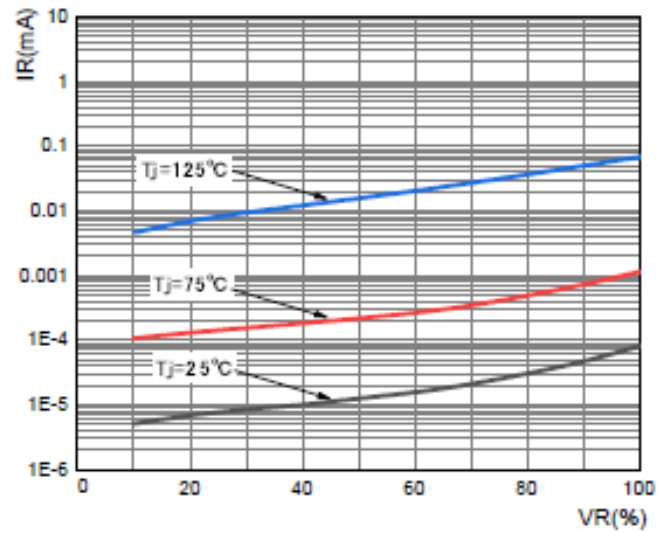
SK220L

FIG.11: TYPICAL FORWARD CHARACTERISTICS

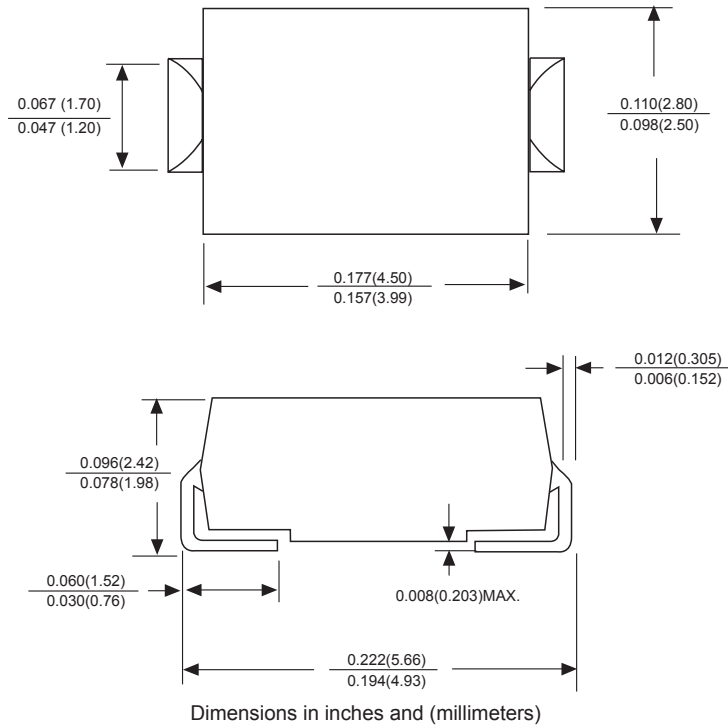


SK220L

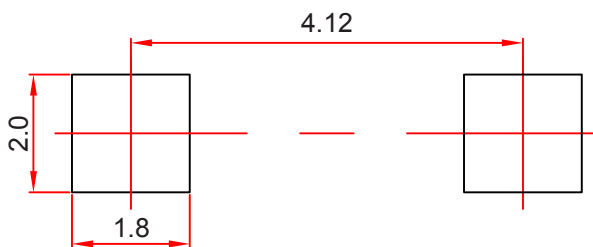
FIG.12: TYPICAL REVERSE CHARACTERISTICS



### SMA Package Outline Dimensions



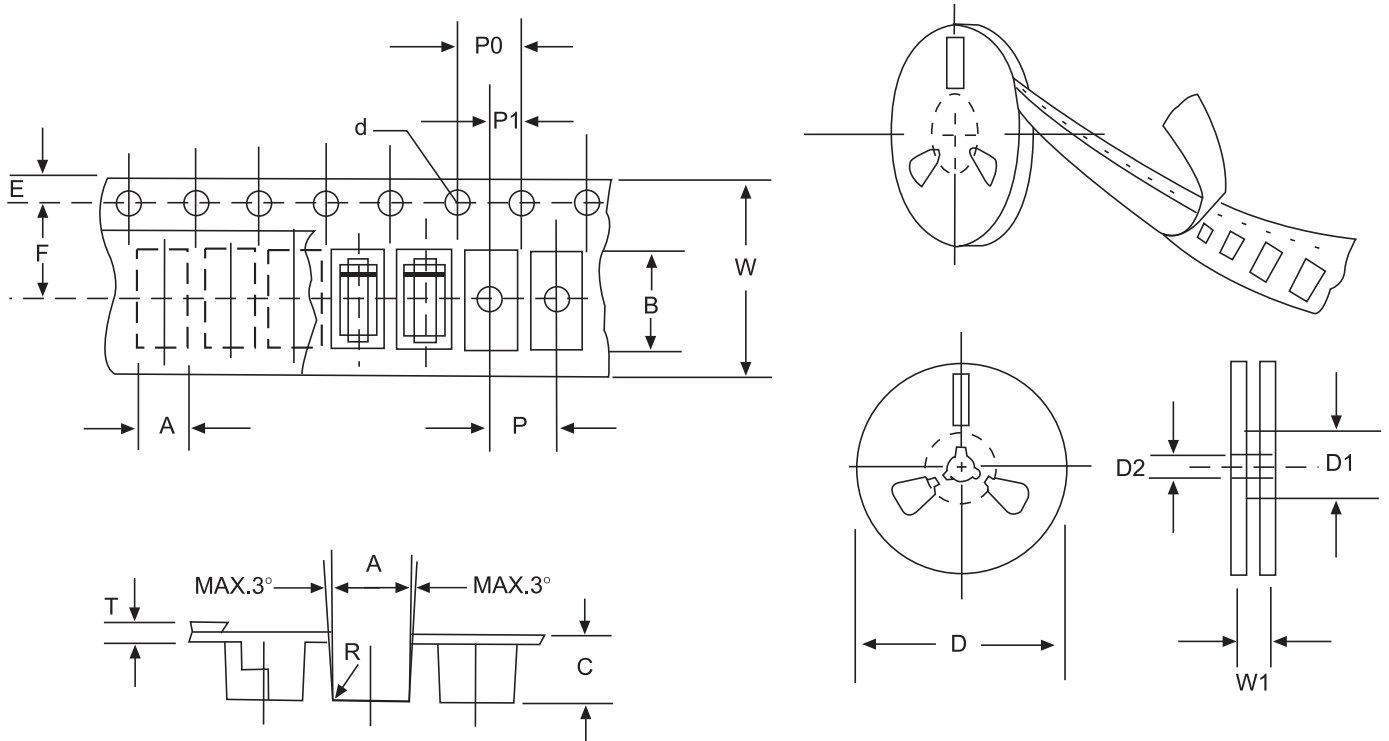
### SMA Suggested Pad Layout



**Note:**

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

## Reel Taping Specifications For Surface Mount Devices-SMA



**FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING**

ITEM	SYMBOL	SMA mm(inch)
Carrier width	A	2.79±0.1(0.110±0.004)
Carrier length	B	5.33±0.1(0.210±0.004)
Carrier depth	C	2.36±0.1(0.093±0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	279±2.0 (11± 0.079)
Reel inner diameter	D1	75±1.0 (2.95 ±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Strocket hole position	E	1.75±0.1(0.069±0.004)
Punch hole position	F	5.5±0.05(0.217±0.002)
Punch hole pitch	P	4.0±0.1(0.157±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	0.28±0.02(0.011 ±0.0008)
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.