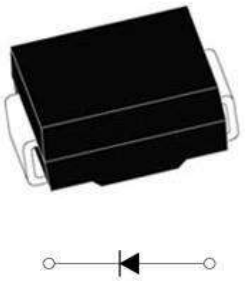
SMB Plastic-Encapsulate Diodes

Schottky Rectifier Diodes

Features

- $I_{F(AV)}$ 8A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

SMB



Applications

- Rectifier

Marking

- SS8X

X：From 2 To 20

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SK8								
				2B	3B	4B	5B	6B	8B	10B	15B	20B
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, TL(Fig.1)	8.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave , 1 cycle , Ta =25℃	200								
Junction Temperature	T_J	℃		-50~+150								
Storage Temperature	T_{STG}	℃		-50 ~ +150								

Electrical Characteristics (T=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition		SK8							
					2	3	4	5	6	8	10	15	20
Peak Forward Voltage	V_F	V	I_F= 8.0A		0.50			0.65		0.80		0.90	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	Ta=25℃	0.2	0.1							
	I_{RRM2}			Ta=105℃	10	1.0							
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		112 [1)]								
	$R_{\theta J-L}$		Between junction and terminal		12 [1)]								

Notes:

1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

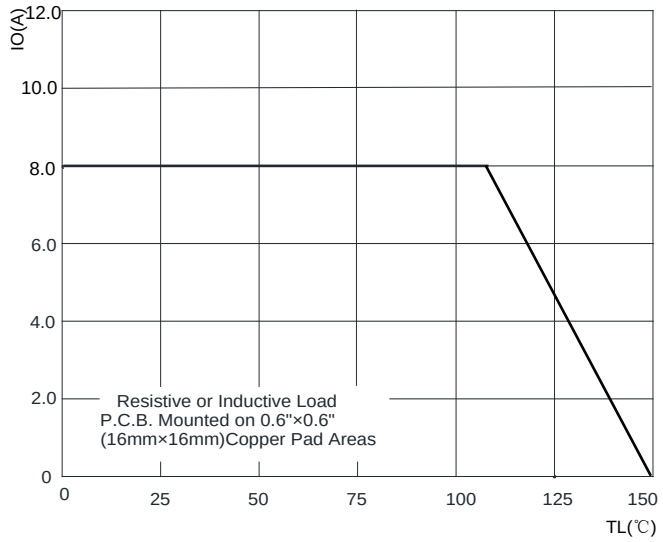


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

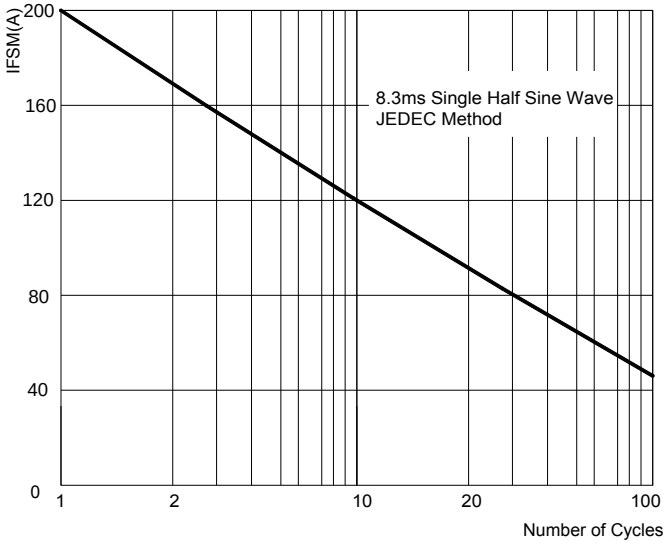


FIG.3: TYPICAL FORWARD CHARACTERISTICS

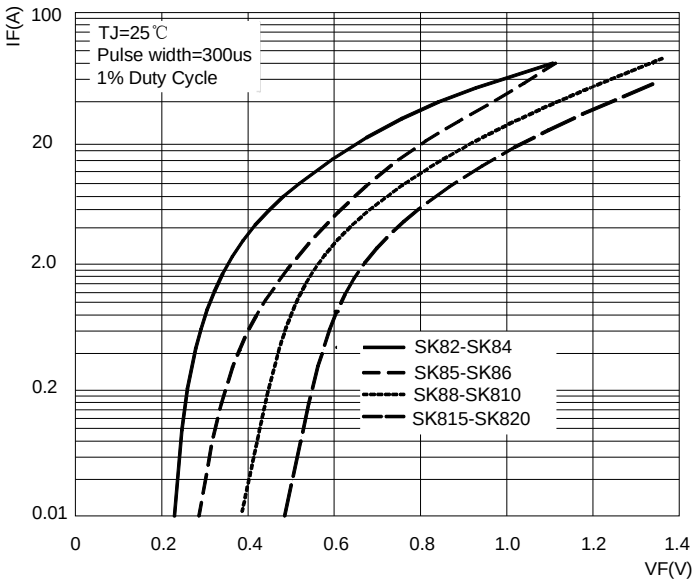
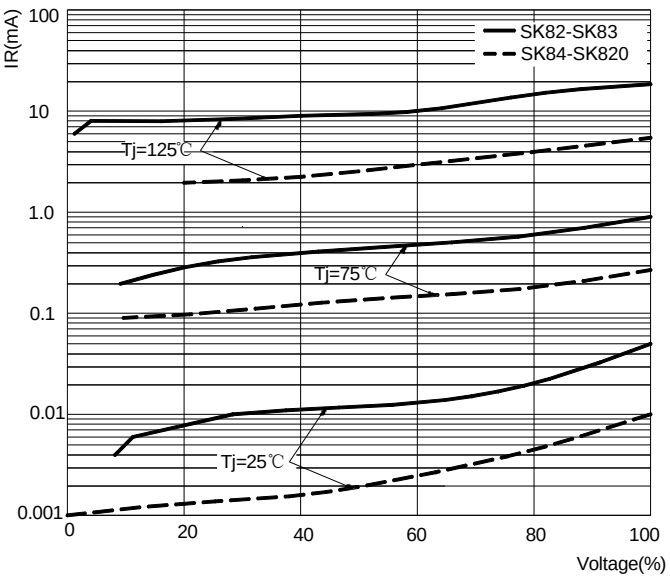
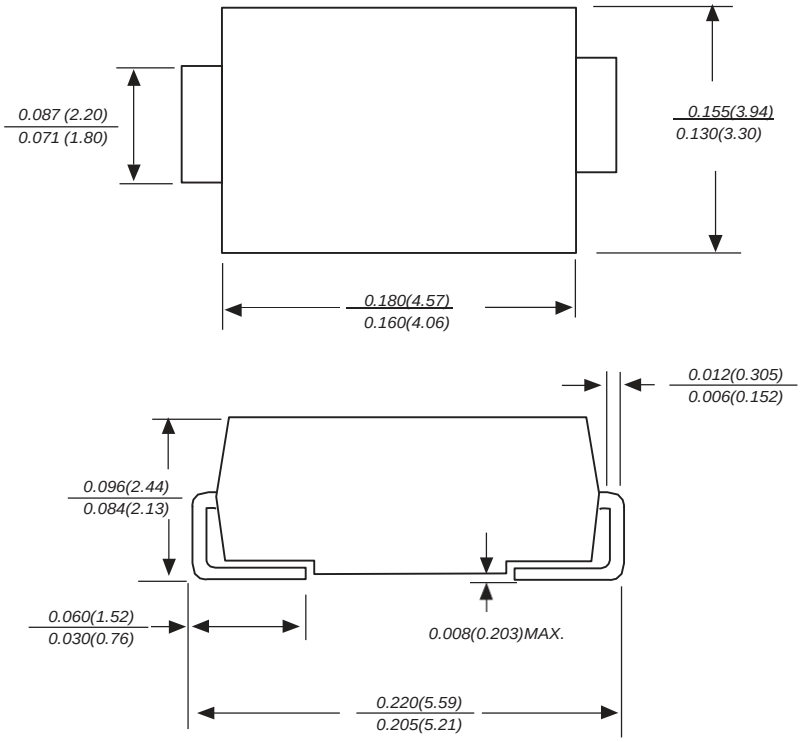


FIG.4：TYPICAL REVERSE CHARACTERISTICS

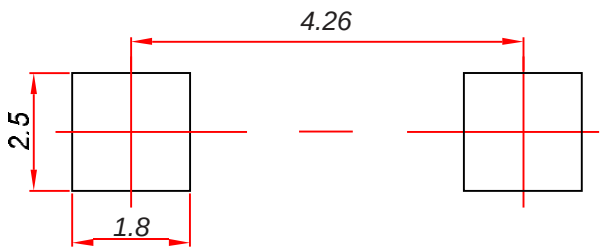


SMB Package Outline Dimensions



Dimensions in inches and (millimeters)

SMB Suggested Pad Layout



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

Reel Taping Specifications For Surface Mount Devices-SMBG

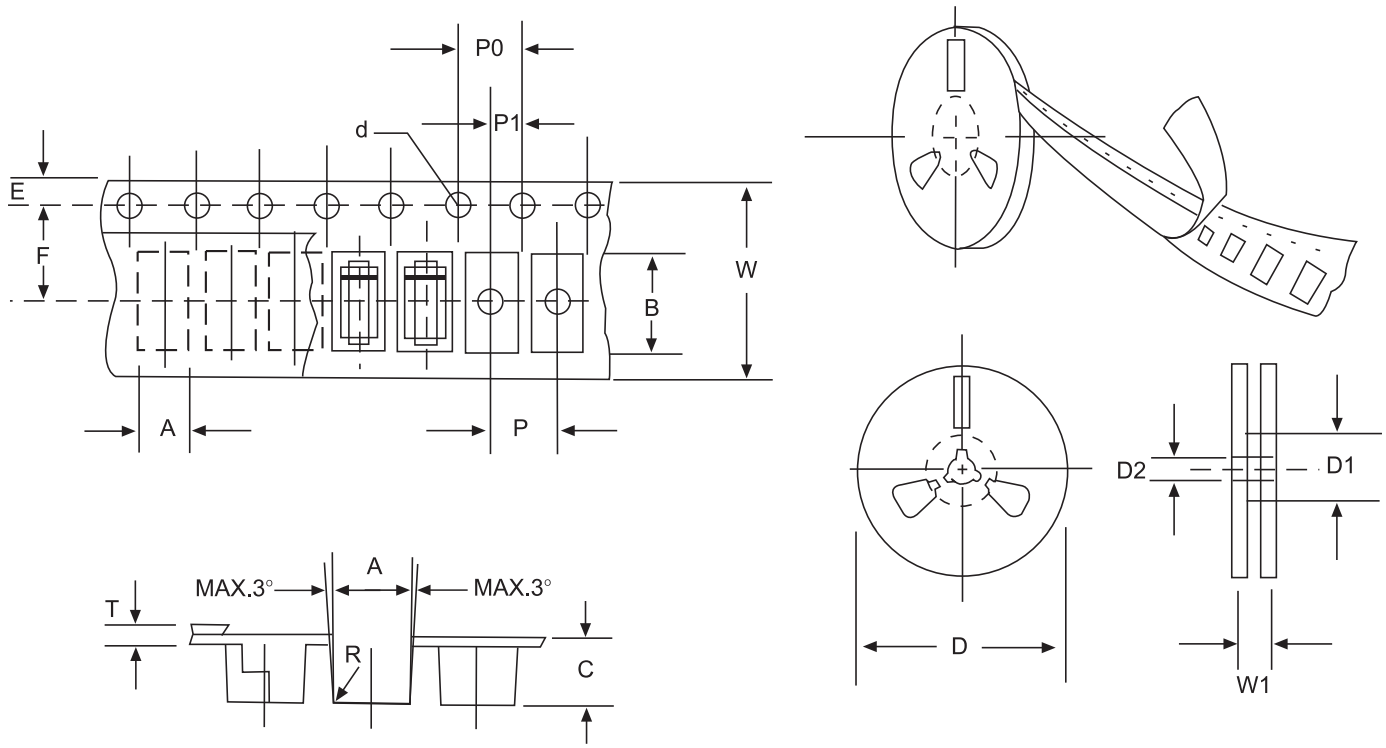


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

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)
Stroket 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)
Totall 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.