SZCJ

Shenzhen Changji Semiconductor Co., LTD.

SMBG Plastic-Encapsulate Diodes

SK22 THRU SK220 Schottky Rectifier Diodes

Features

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

Applications

- Rectifier

Marking

- SK2X

  X：From 2 To 20

SMBG



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℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SK2							
					2	3	4	5	6	8	10	15	20
Peak Forward Voltage	V_F	V	I_F=2.0A		0.55			0.70		0.85		0.95	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	T_a=25℃	0.5					0.1			
	I_{RRM2}			T_a=100℃	10					5.0			
Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient		72								
	$R_{\theta J-L}$		Between junction and terminal		18								
Juction Capacitance (Typical)	Cj	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 juction to lead mounted on FR4 PCB double sided copper mini pad

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

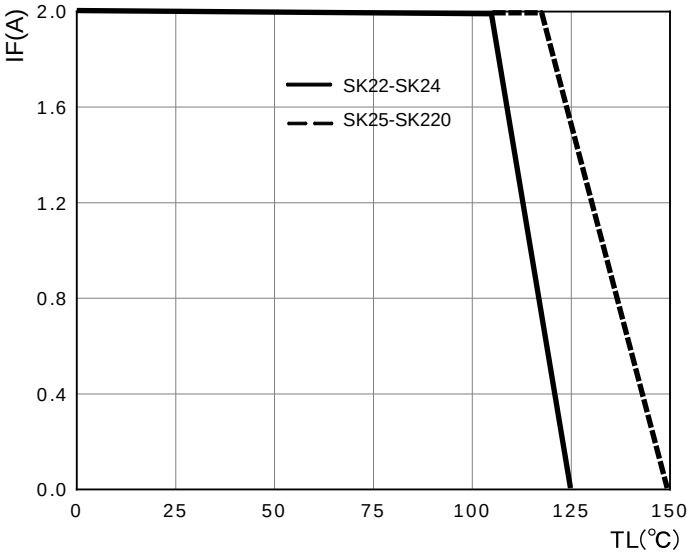
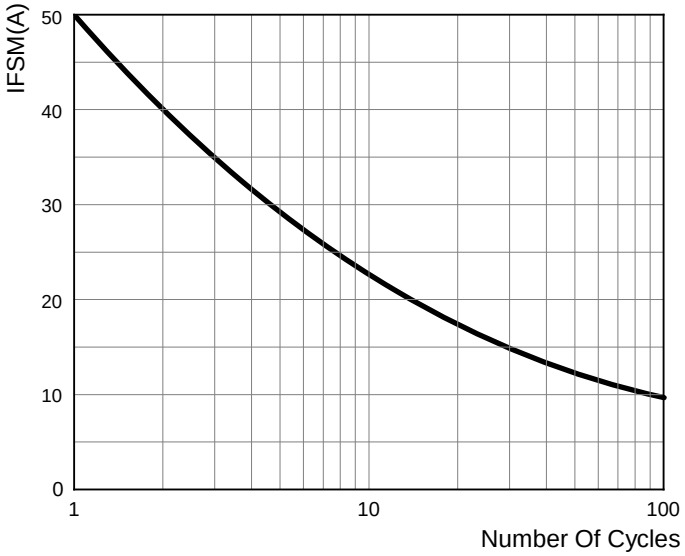
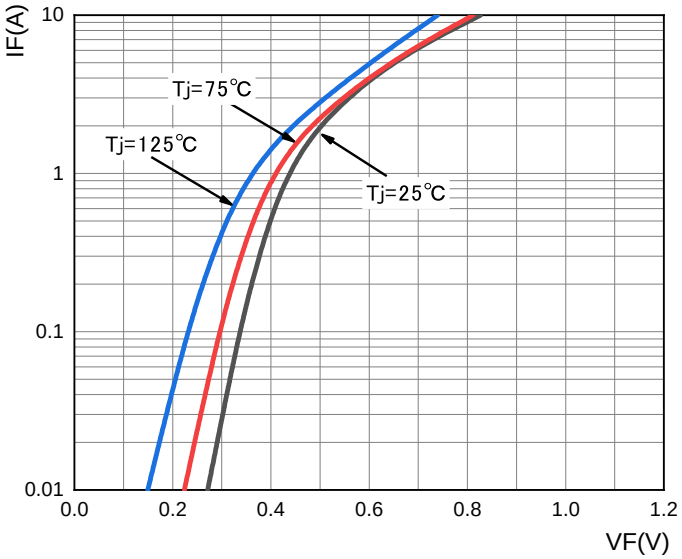


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



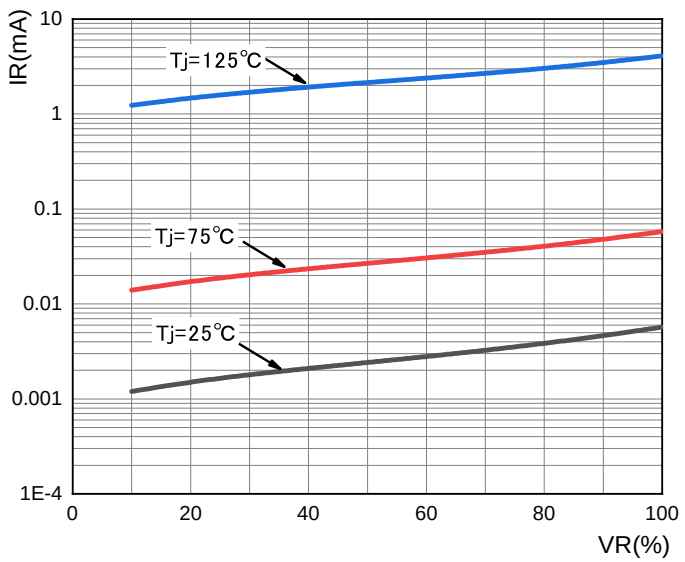
SK22-SK24

FIG.3: TYPICAL FORWARD CHARACTERISTICS



SK22-SK24

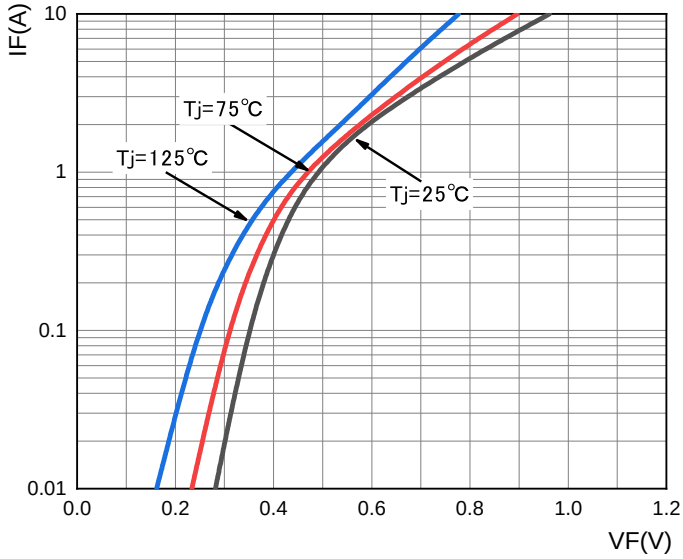
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

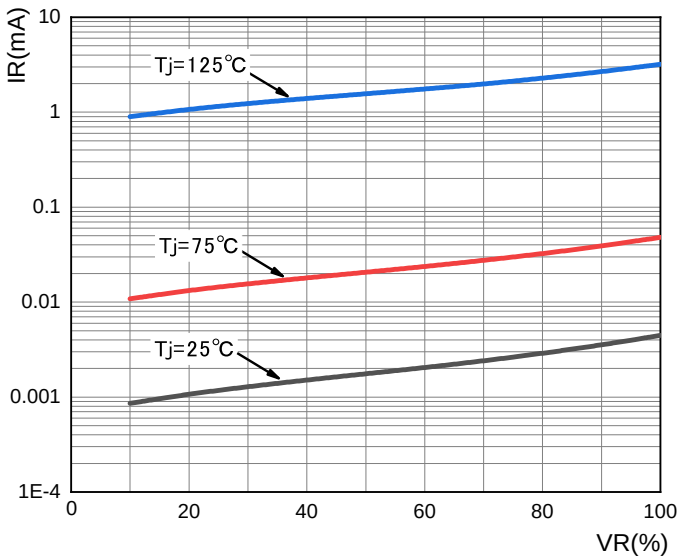
SK25-SK26

FIG.5: TYPICAL FORWARD CHARACTERISTICS



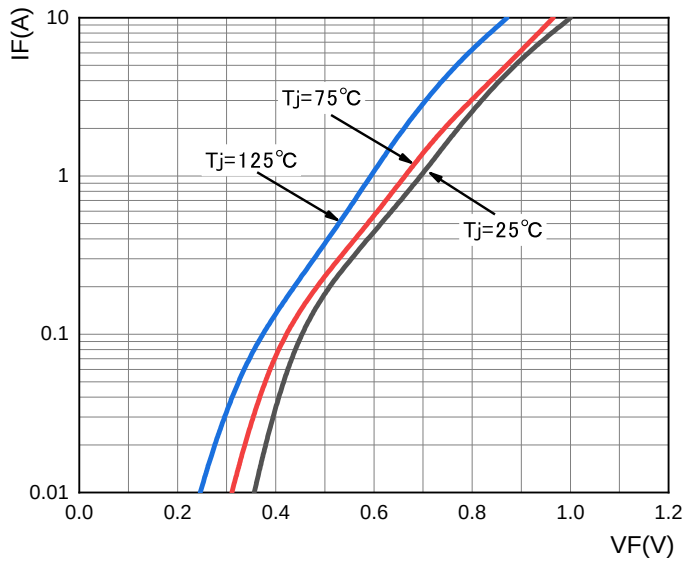
SK25-SK26

FIG.6: TYPICAL REVERSE CHARACTERISTICS



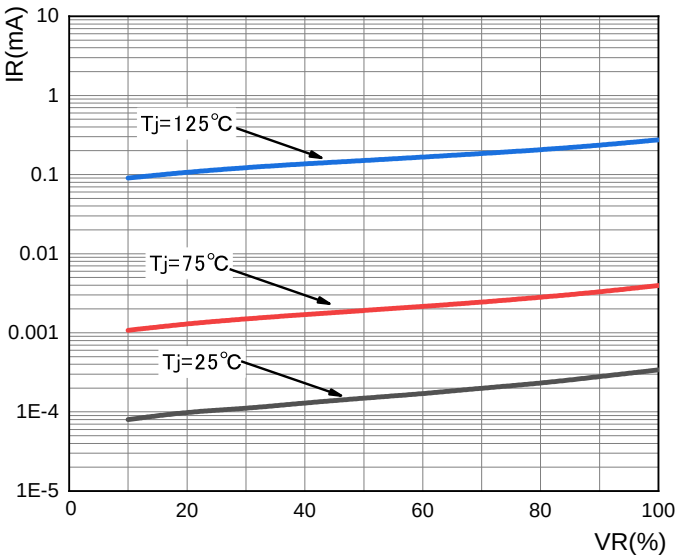
SK28-SK210

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SK28-SK210

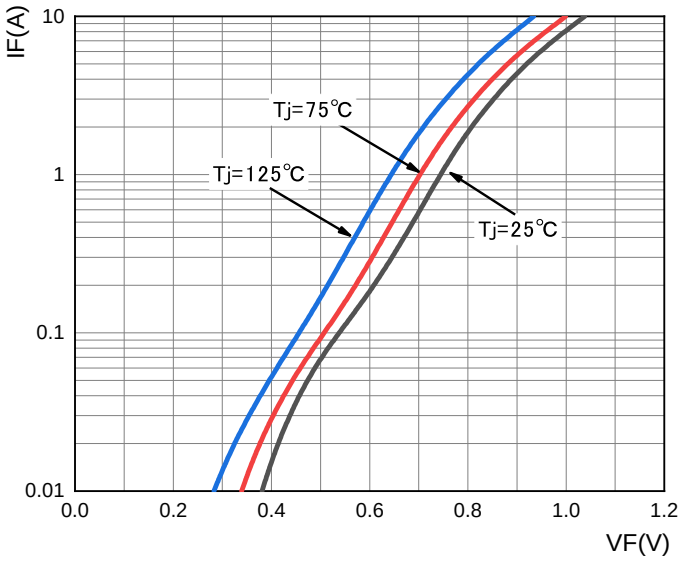
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

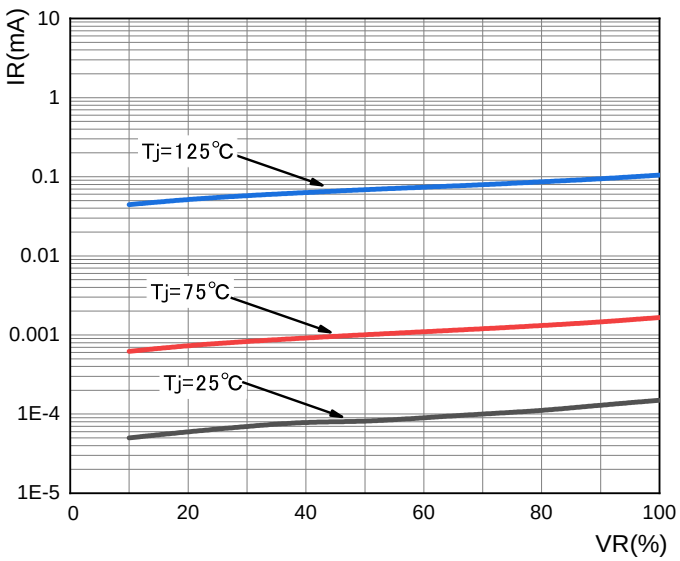
SK215

FIG.9: TYPICAL FORWARD CHARACTERISTICS



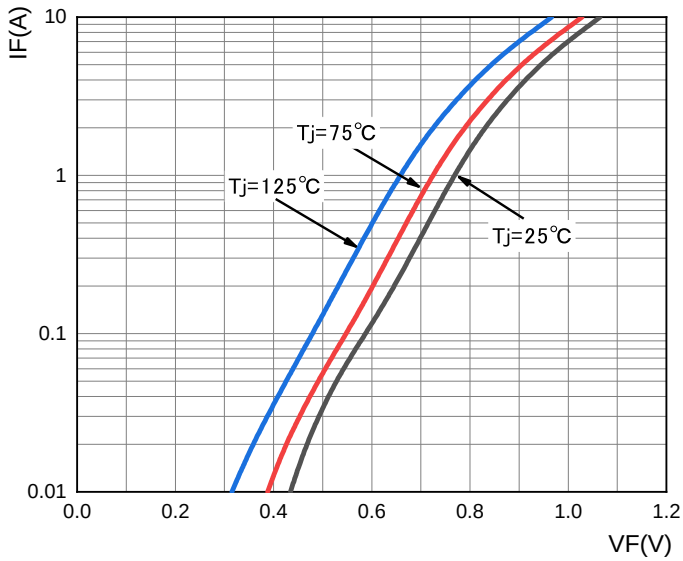
SK215

FIG10: TYPICAL REVERSE CHARACTERISTICS



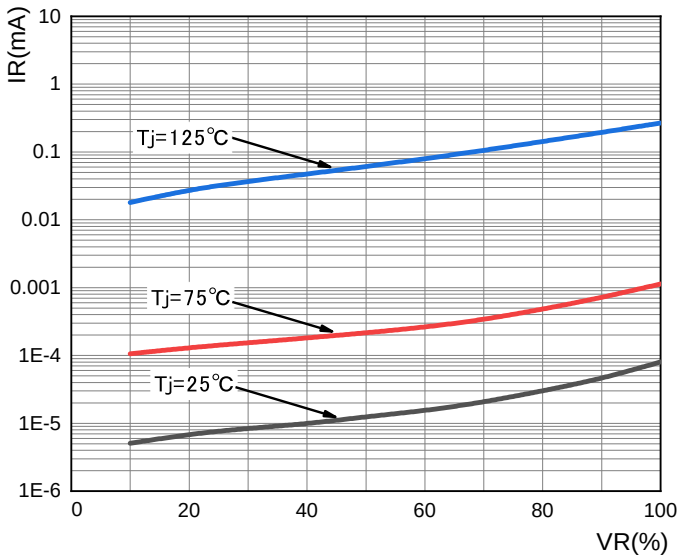
SK220

FIG.11: TYPICAL FORWARD CHARACTERISTICS

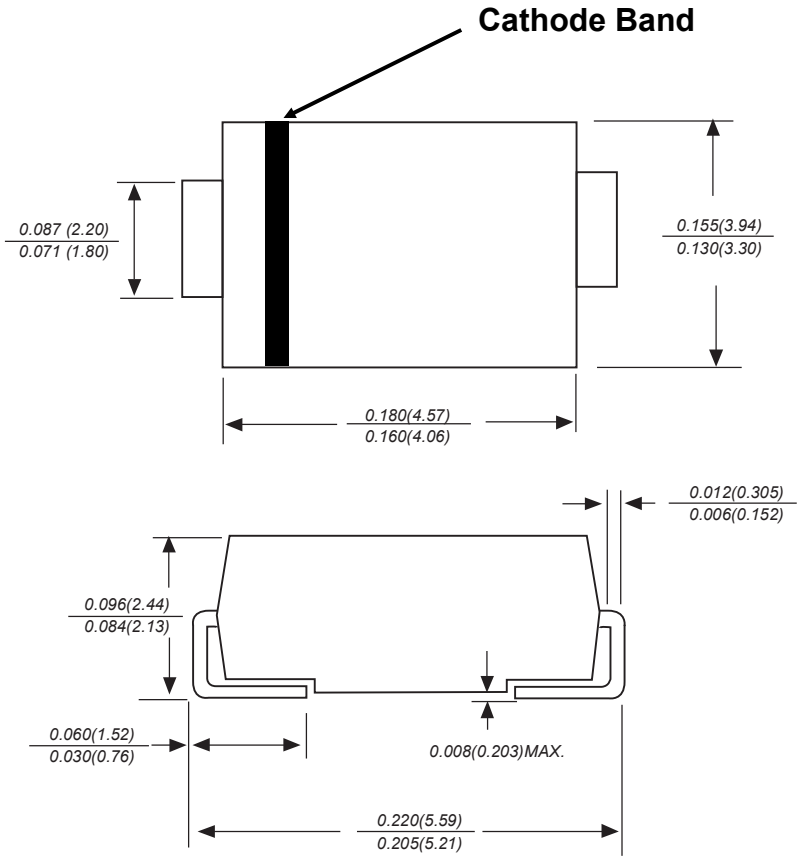


SK220

FIG.12: TYPICAL REVERSE CHARACTERISTICS

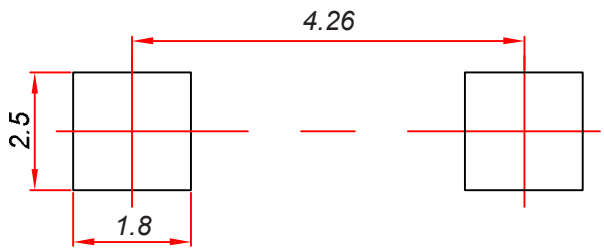


SMBG Package Outline Dimensions



Dimensions in inches and (millimeters)

SMBG Suggested Pad Layout



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

NOTICE
SZCJ reserves the right to make modifications,enhancements,improvements,corrections or other changes without further notice to any product herein.SZCJ does not assume any liability arising out of the application or use of any product described herein.

Reel Taping Specifications For Surface Mount Devices- SMBG

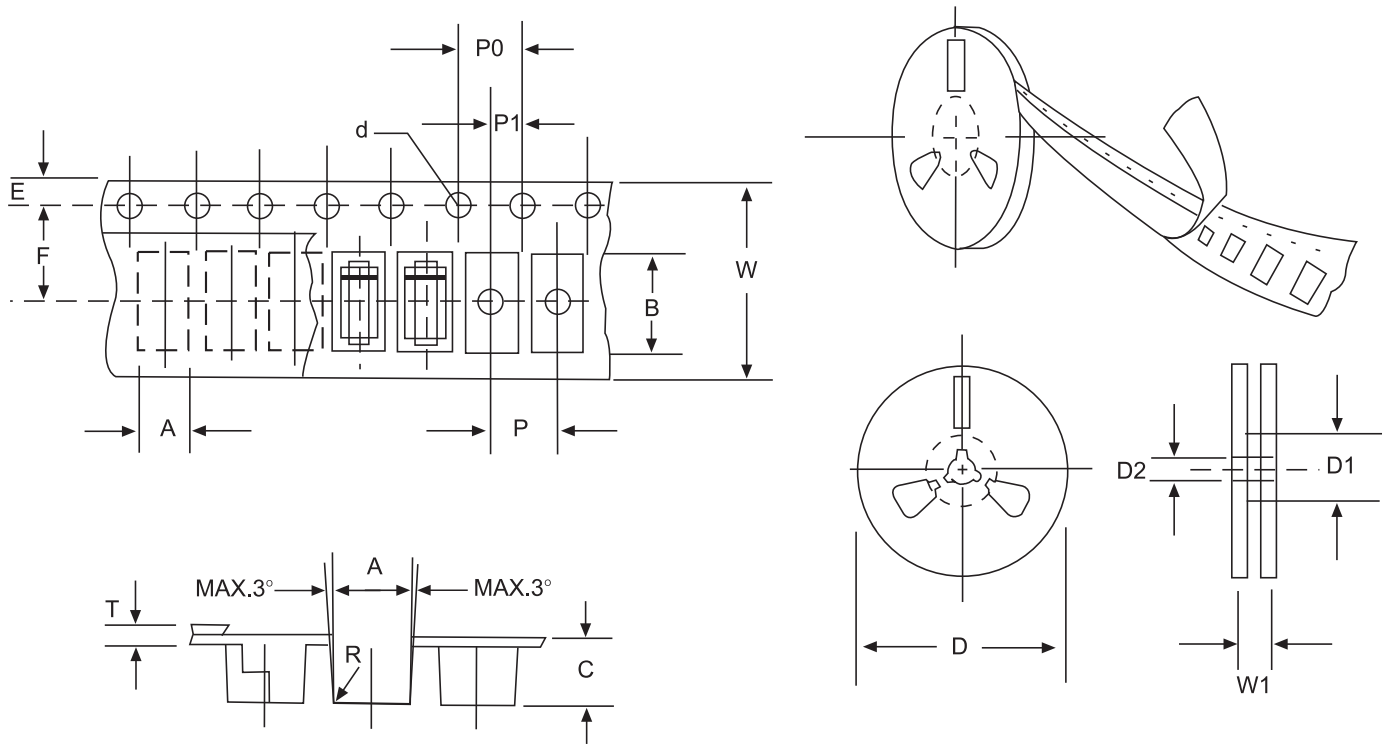


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

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.