SZCJ

Shenzhen Changji Semiconductor Co., LTD.

SMCG Plastic-Encapsulate Diodes

SK32 THRU SK320 Schottky Rectifier Diodes

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

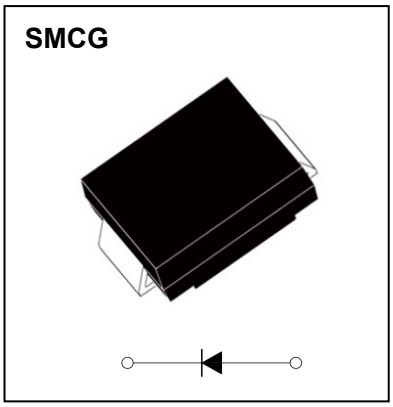
- Rectifier

Marking

- SK3X

  X：From 2 To 20

SMCG



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SK3								
				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	3.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25℃	100								
Junction Temperature	T_J	℃		-55~+150								
Storage Temperature	T_{STG}	℃		-55 ~ +150								

Electrical Characteristics (T =25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SK3							
					2	3	4	5	6	8	10	15	20
Peak Forward Voltage	V_F	V	I_F=3.0A		0.55			0.7		0.85		0.95	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	Ta=25℃	0.5					0.1			
	I_{RRM2}			Ta=100℃	10					5.0			
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		90								
	$R_{\theta J-L}$		Between junction and terminal		9								
Juction Capacitance (Typical)	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		178			134		85		66	57

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on 1" x 1"(25.4mm x 25.4mm) FR4 PCB, double sided copper, with minimum pad layout

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

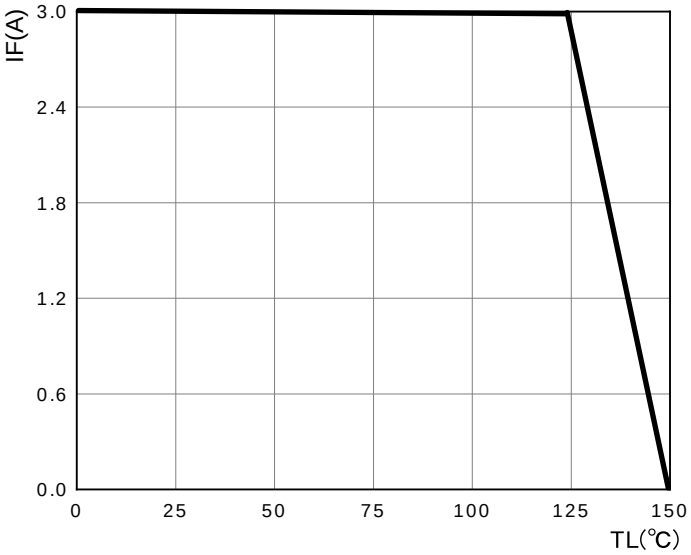
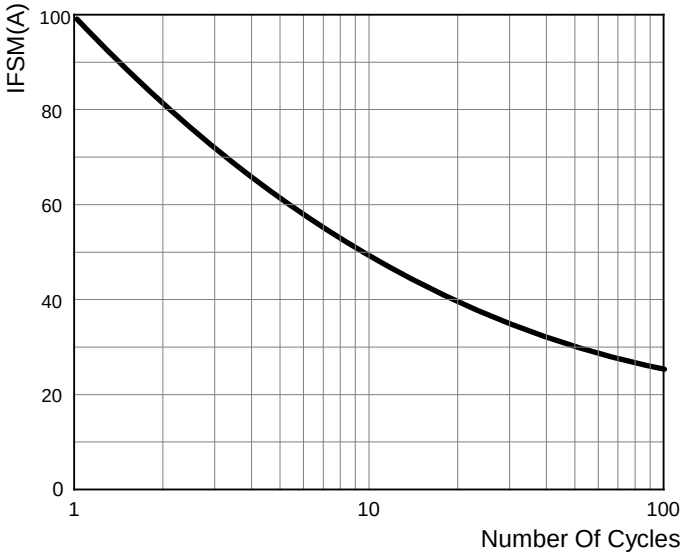
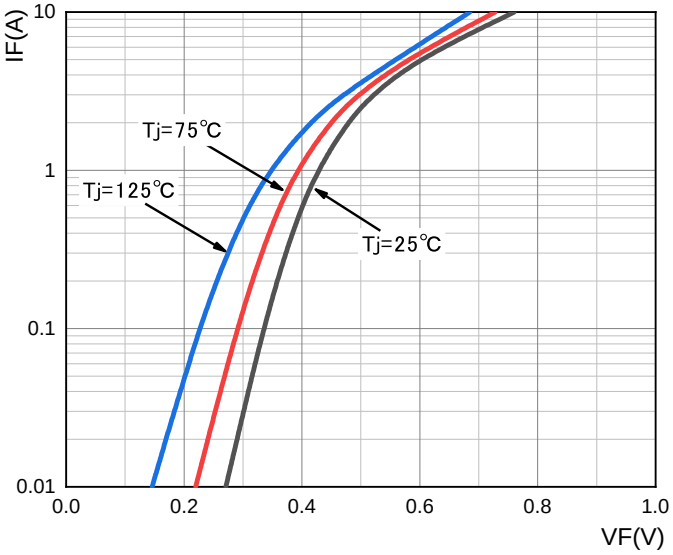


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



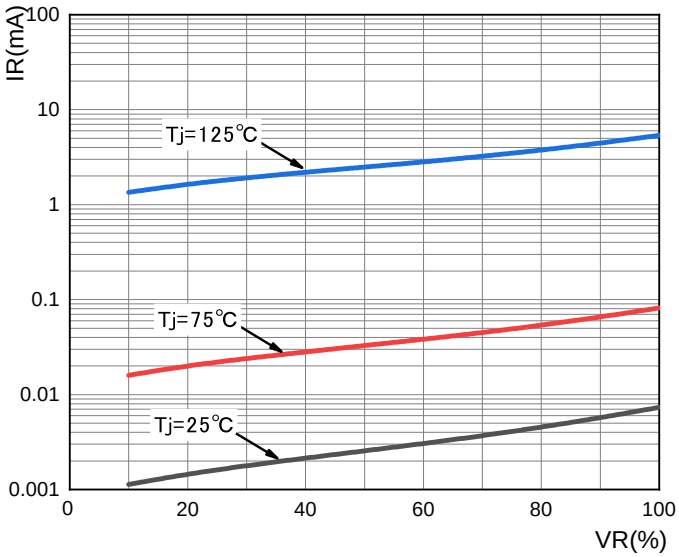
SK32-SK34

FIG.3: TYPICAL FORWARD CHARACTERISTICS



SK32-SK34

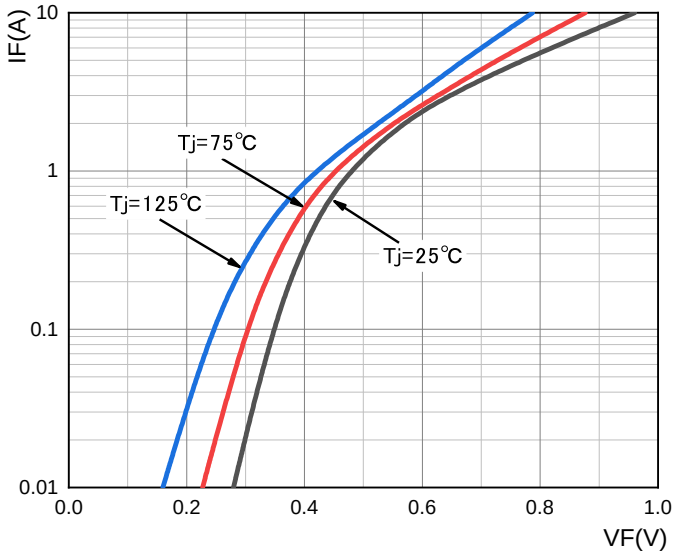
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

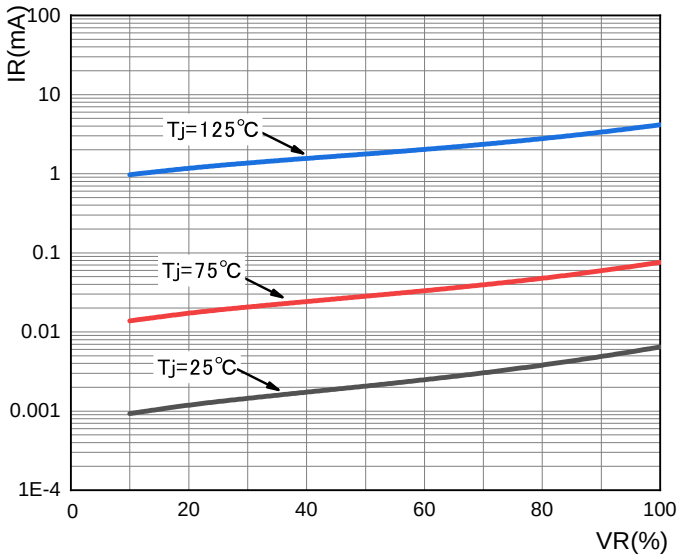
SK35-SK36

FIG.5: TYPICAL FORWARD CHARACTERISTICS



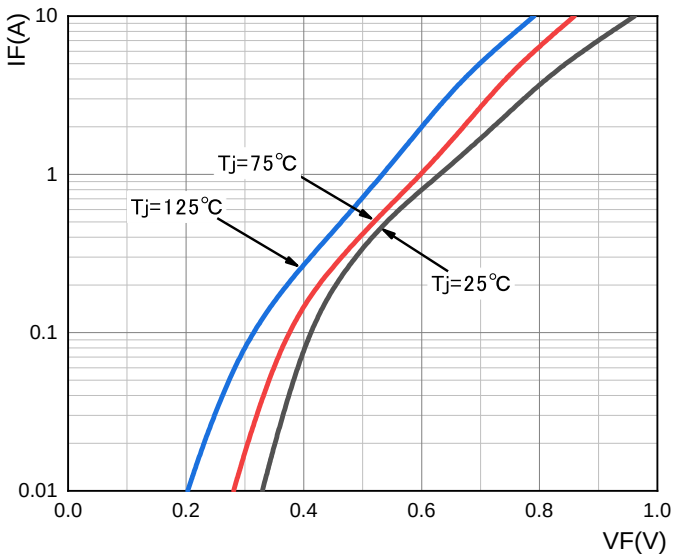
SK35-SK36

FIG.6: TYPICAL REVERSE CHARACTERISTICS



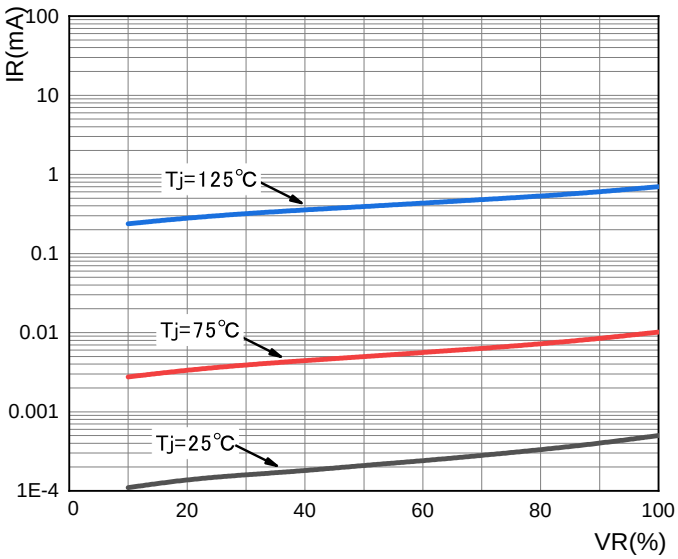
SK38-SK310

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SK38-SK310

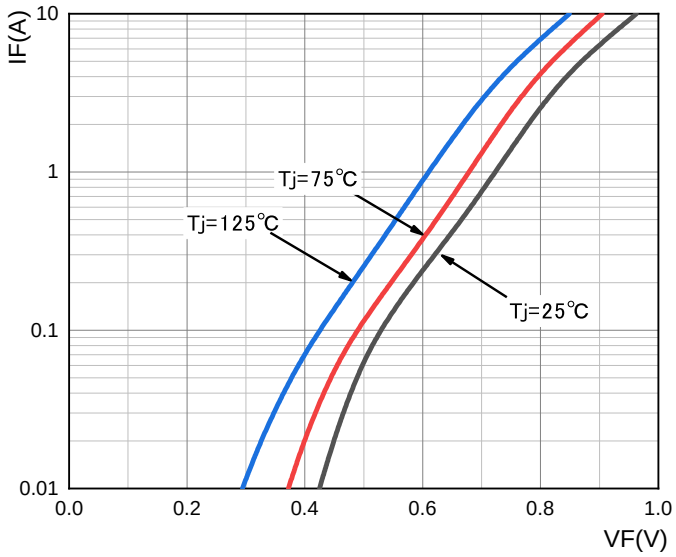
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

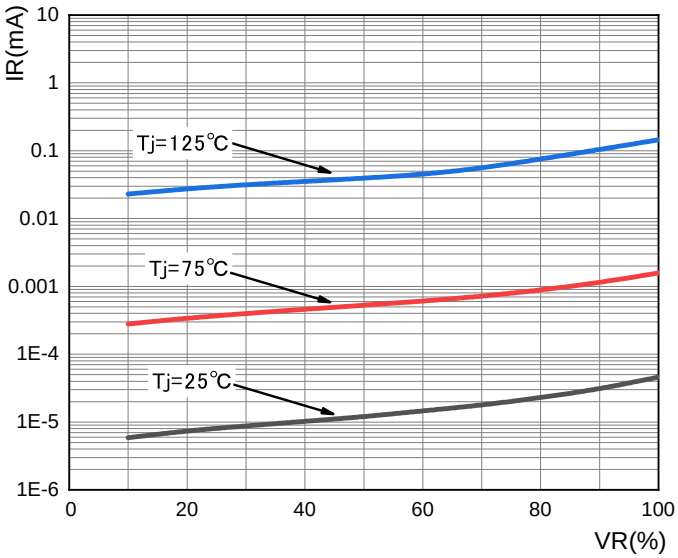
SK315

FIG.9: TYPICAL FORWARD CHARACTERISTICS



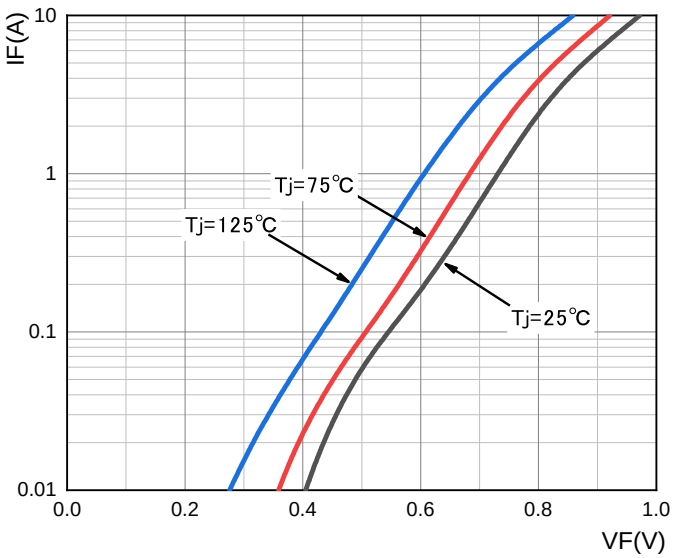
SK315

FIG.10: TYPICAL REVERSE CHARACTERISTICS



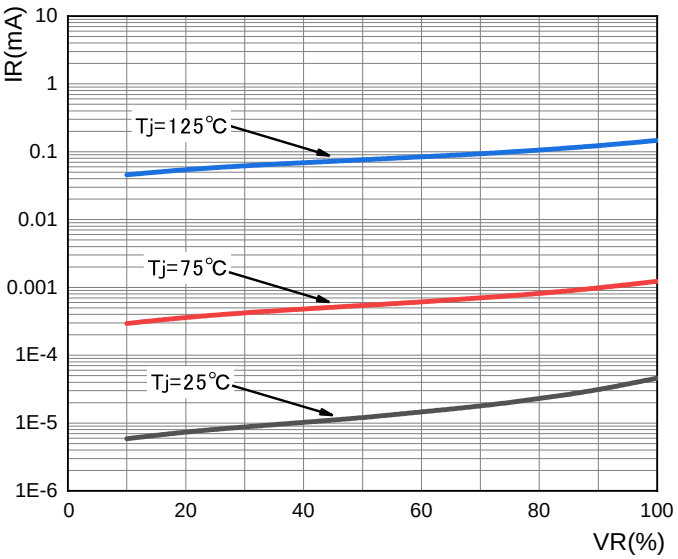
SK320

FIG.11: TYPICAL FORWARD CHARACTERISTICS

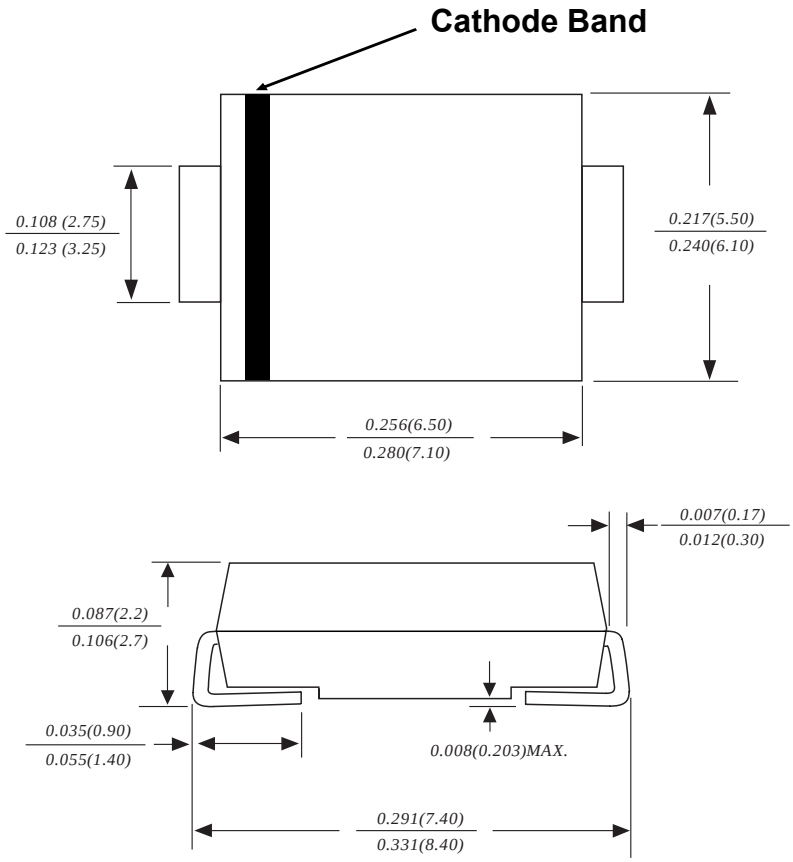


SK320

FIG.12: TYPICAL REVERSE CHARACTERISTICS

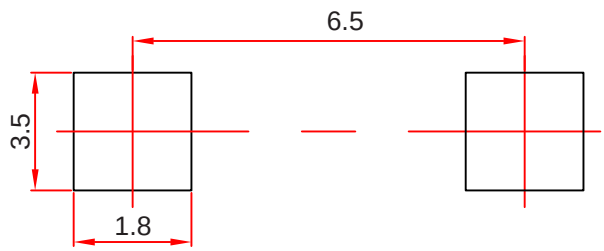


SMCG Package Outline Dimensions



Dimensions in inches and (millimeters)

SMCG 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.

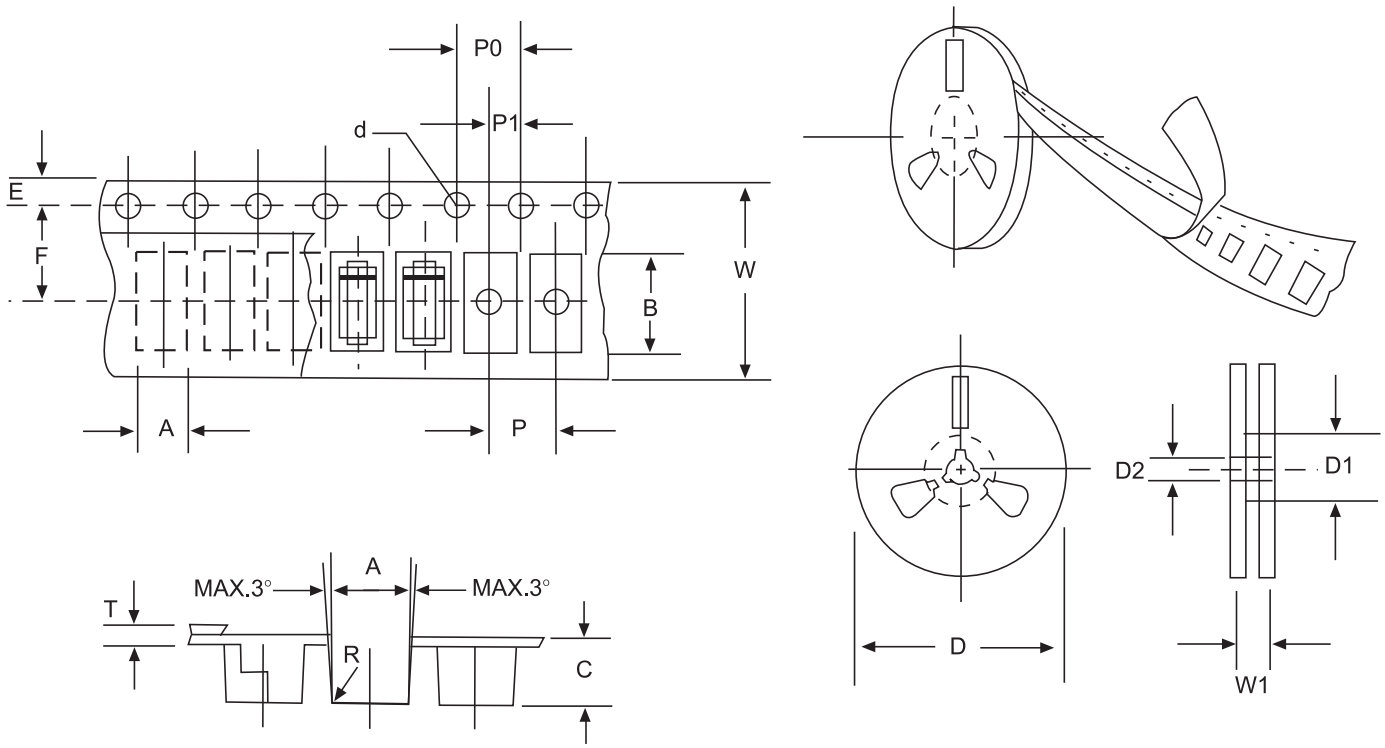


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SMCG mm(inch)
Carrier width	A	6.05±0.1(0.238±0.004)
Carrier length	B	8.31±0.1(0.327±0.004)
Carrier depth	C	2.70±0.1(0.106±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	7.65±0.05(0.301±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	0.3±0.1(0.012±0.004)
Tape width	W	16.0±0.2(0.630±0.008)
Reel width	W1	24.0±2.0(0.945±0.079)

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