

SMAG Plastic-Encapsulate Diodes

SS22 THRU SS220

Schottky Rectifier Diodes

Features

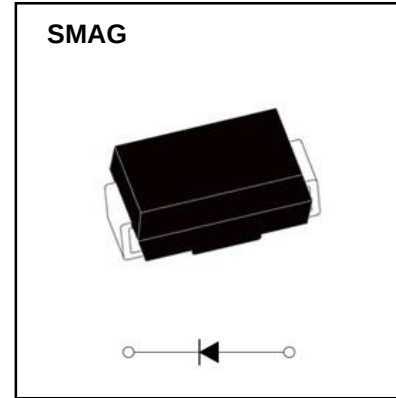
- $I_{F(AV)}$ 2A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- SS2X
- X : From 2 To 20



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SS2								
				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°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SS2								
					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				
			T _a =100℃	10				5.0					
Thermal Resistance	R _{θJ-A}	℃/W	Between junction and ambient		88								
	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			92		53		40	

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

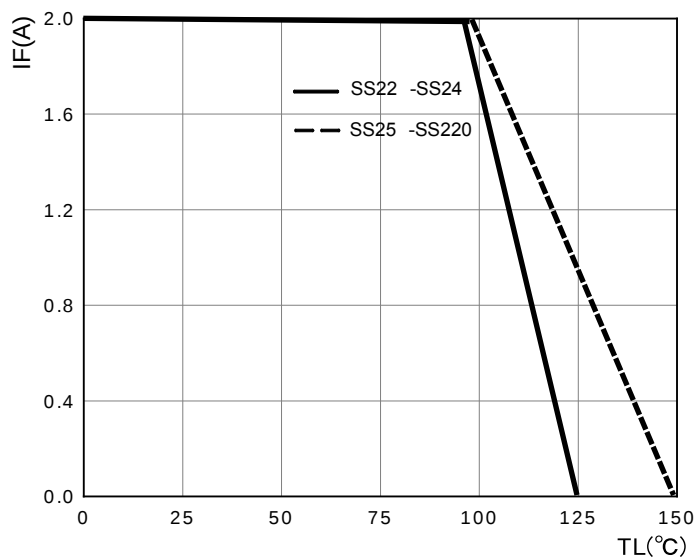
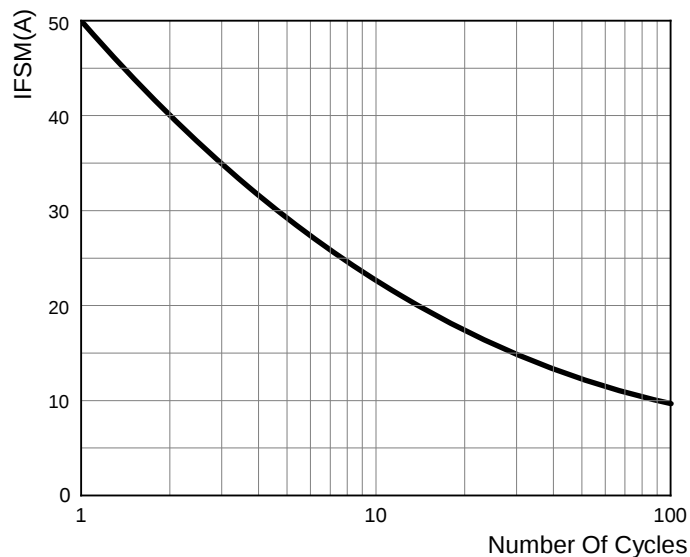
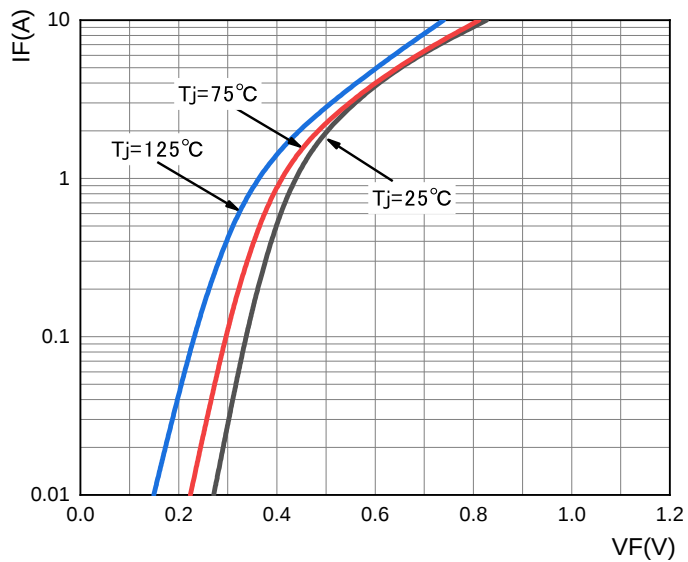


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



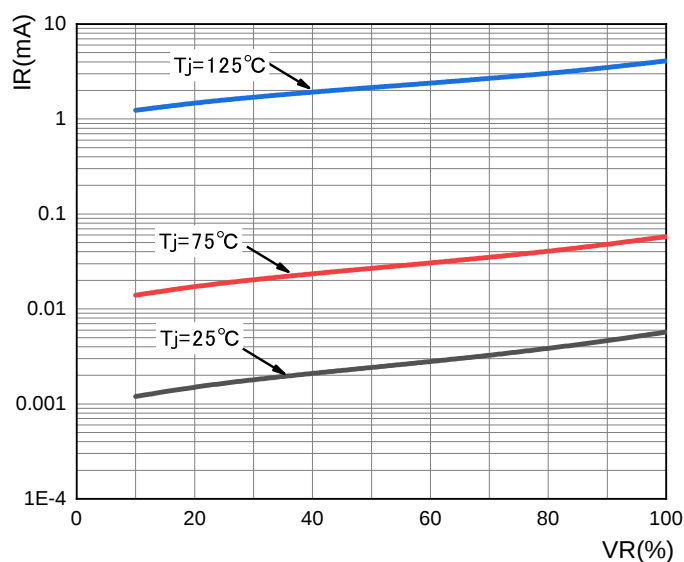
SS22-SS24

FIG.3: TYPICAL FORWARD CHARACTERISTICS



SS22-SS24

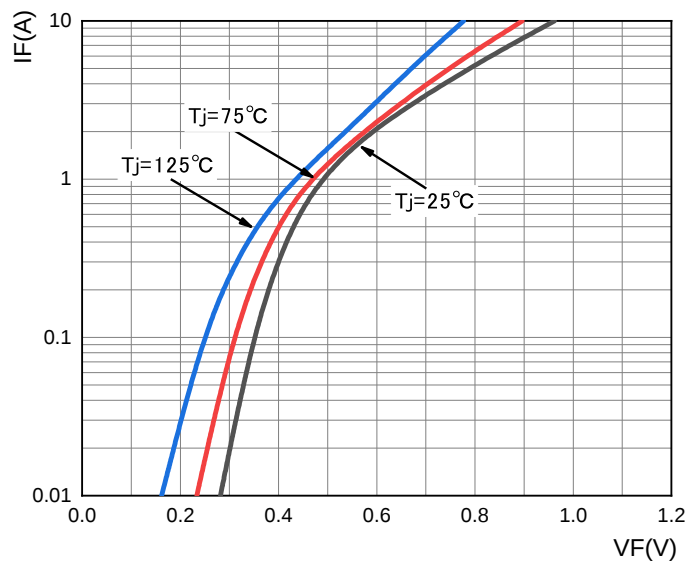
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

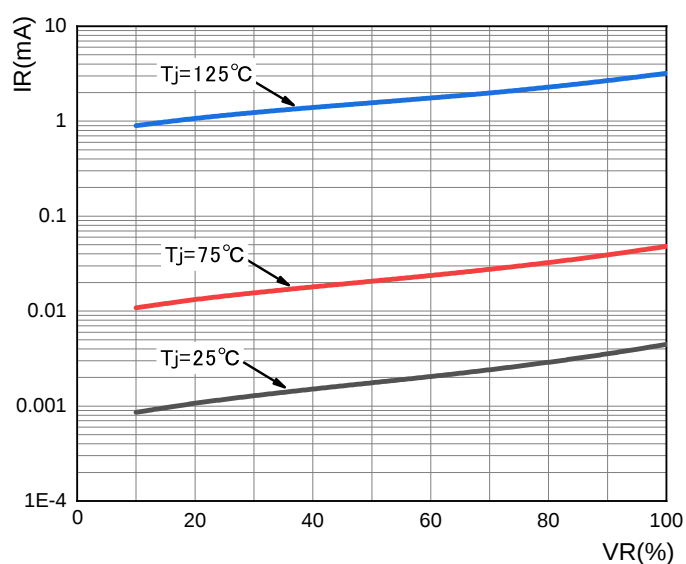
SS25-SS26

FIG.5: TYPICAL FORWARD CHARACTERISTICS



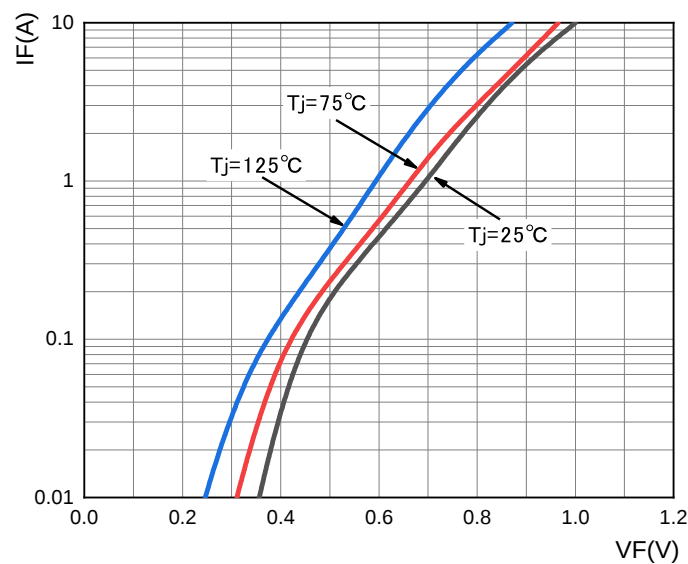
SS25-SS26

FIG.6: TYPICAL REVERSE CHARACTERISTICS



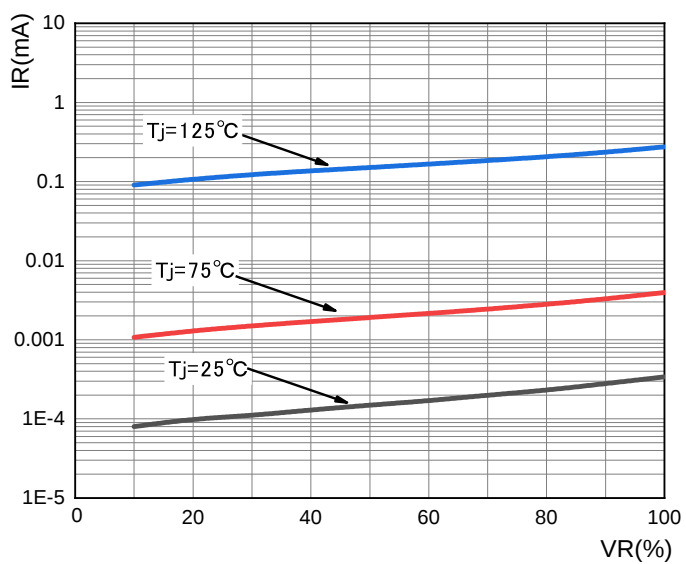
SS28-SS210

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SS28-SS210

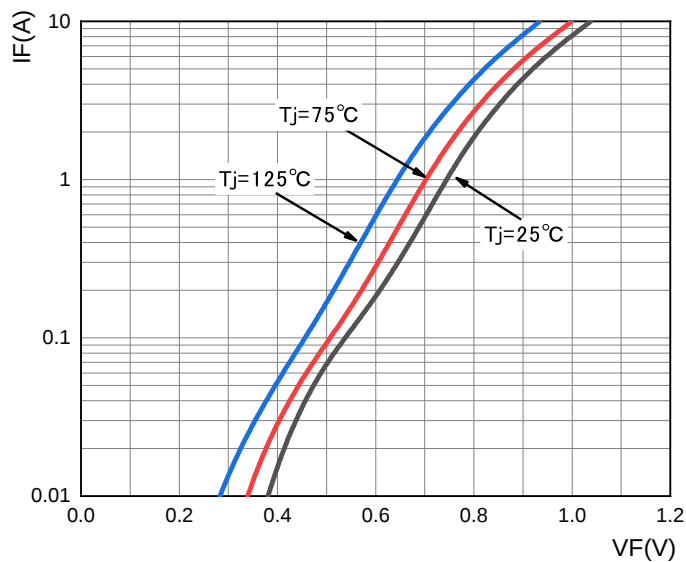
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

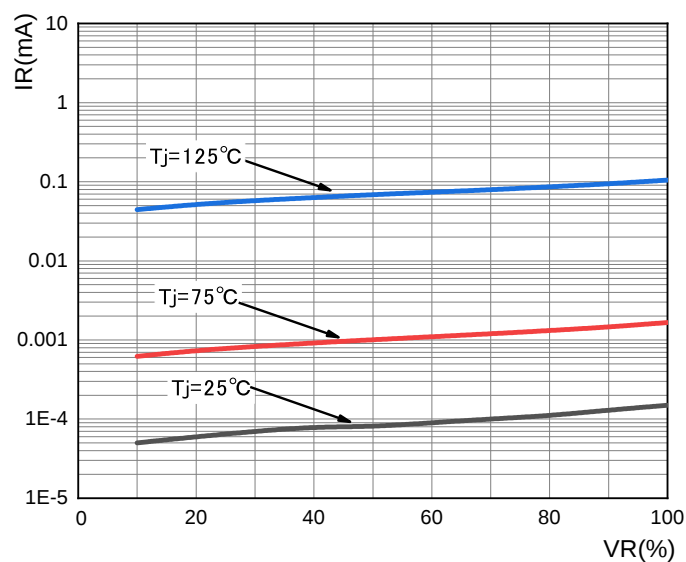
SS215

FIG.9: TYPICAL FORWARD CHARACTERISTICS



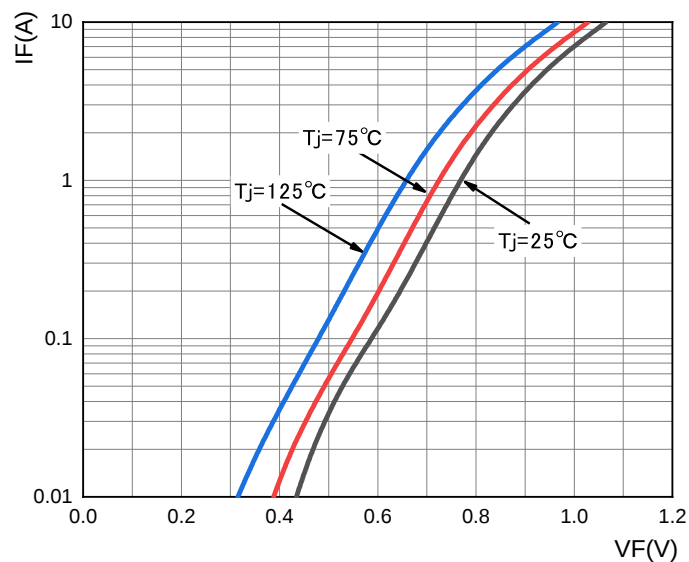
SS215

FIG.10: TYPICAL REVERSE CHARACTERISTICS



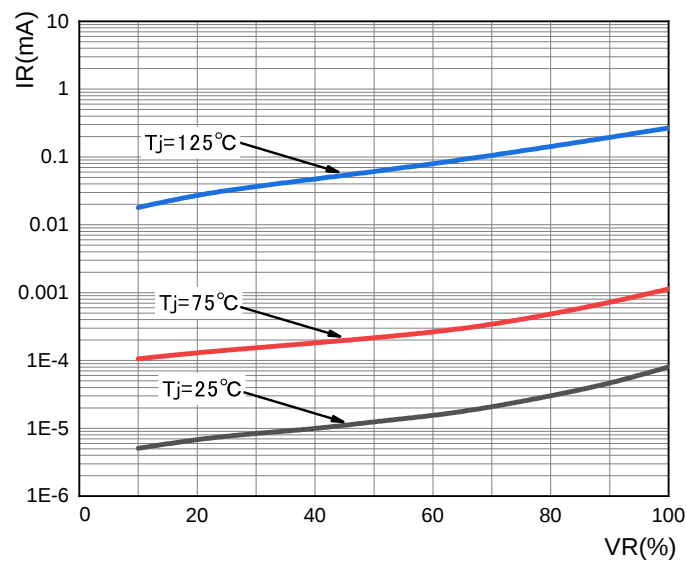
SS220

FIG.11: TYPICAL FORWARD CHARACTERISTICS

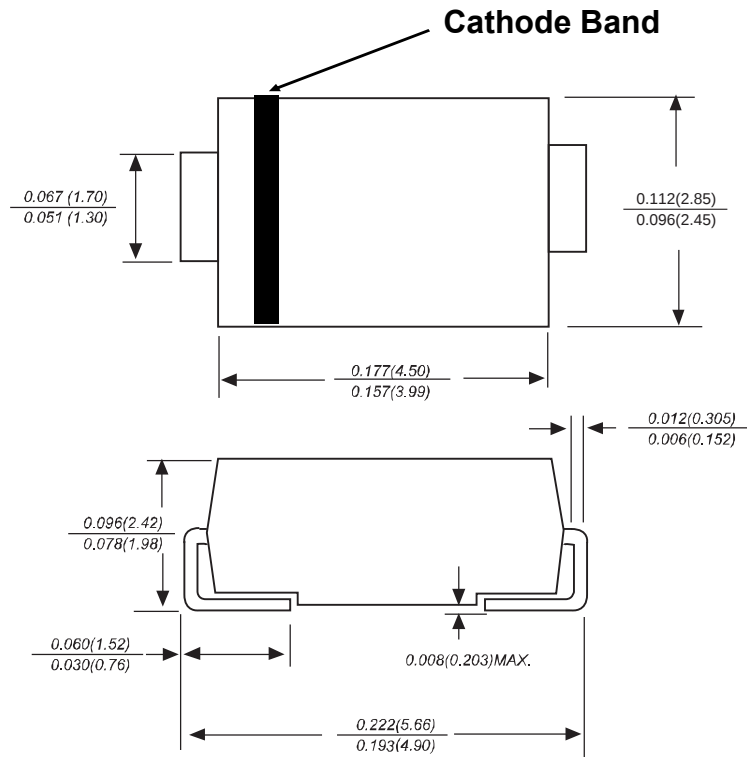


SS220

FIG.12: TYPICAL REVERSE CHARACTERISTICS

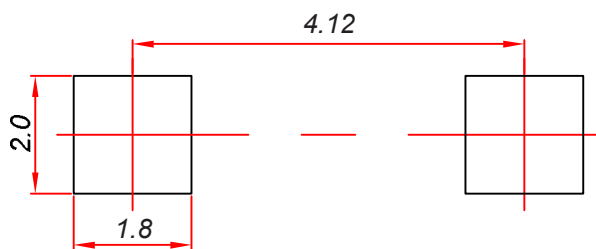


SMAG Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAG Suggested Pad Layout



Note:

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

NOTICE

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Reel Taping Specifications For Surface Mount Devices- SMAG

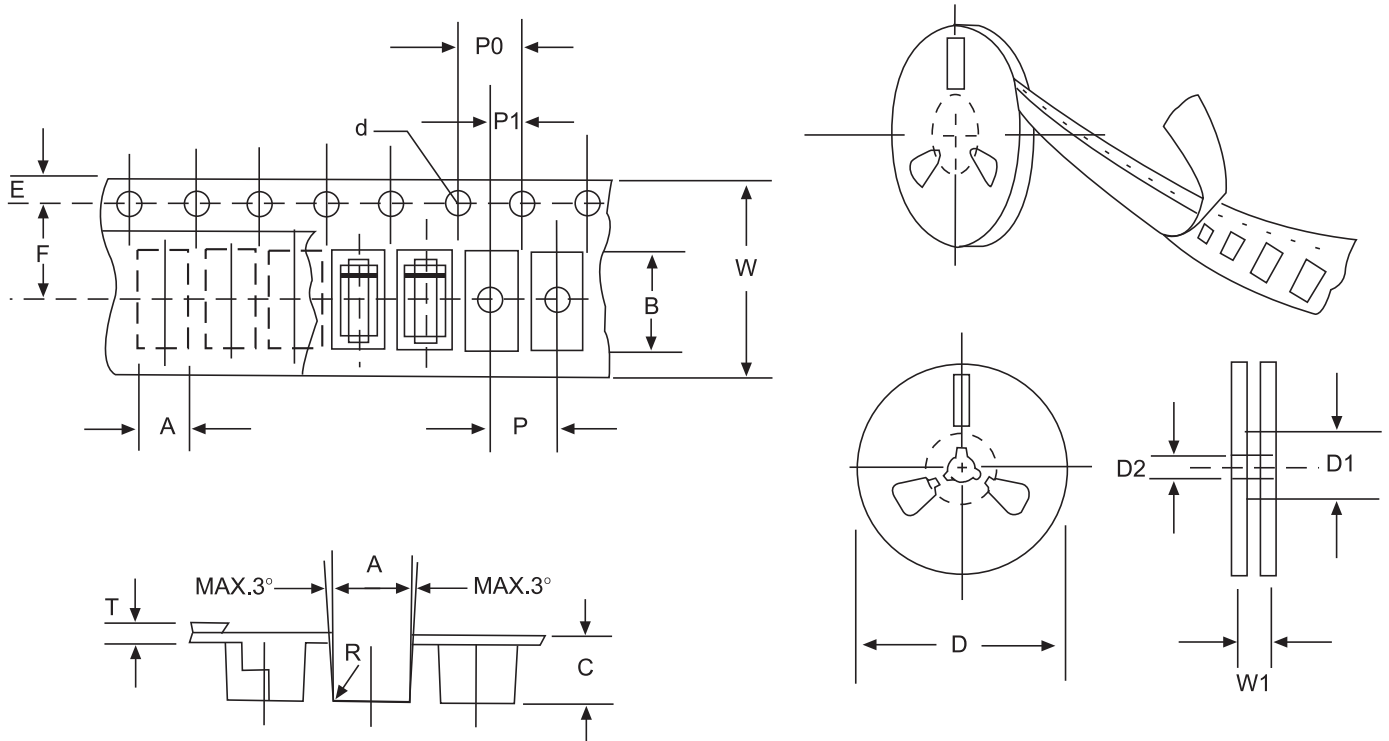


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SMAG 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)
Totall 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.