

**SOD-123FL Plastic-Encapsulate Diodes****DSS32 THRU DSS320 Schottky Rectifier Diodes****Features**

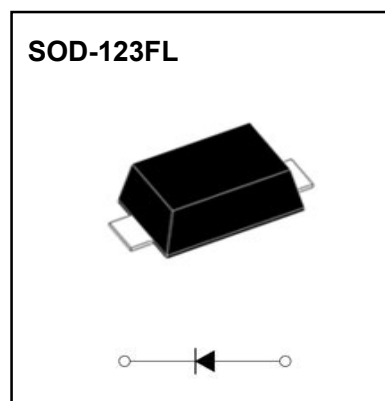
- $I_{F(AV)}$ 3A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- DSS32-DSS320 : S32-S320

**Limiting Values (Absolute Maximum Rating)**

Item	Symbol	Unit	Test Conditions	DSS3								
				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
MaximumRMS 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℃	80								
Junction Temperature	T _J	℃		-55~+150								
Storage Temperature	T _{STG}	℃		-55 ~ +150								

Electrical Characteristics (T=25 °C Unless otherwise specified)

Item	Symbol	Unit	Test Condition		DSS3							
					2	3	4	5	6	8	10	15
Peak Forward Voltage	V _{FM}	V	I _{FM} =3.0A		0.55		0.7		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(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		54							
	R _{θJ-L}		Between junction and terminal		8.5							
Typical Junction Capacitance	C _J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.		146		117		85		66	57

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

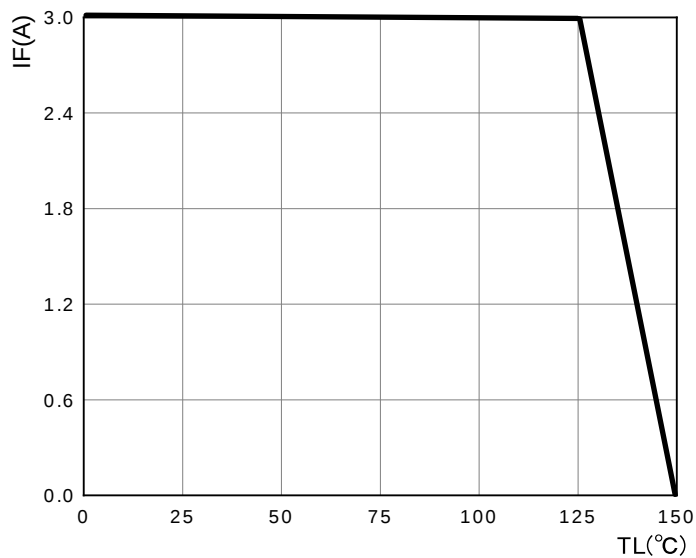
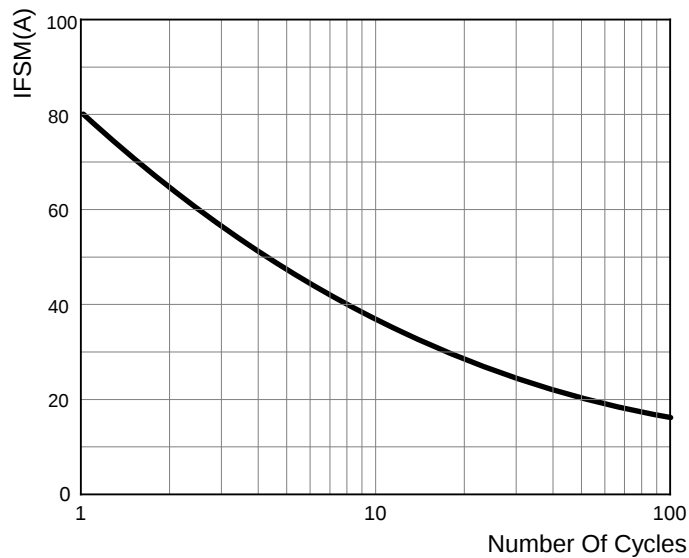
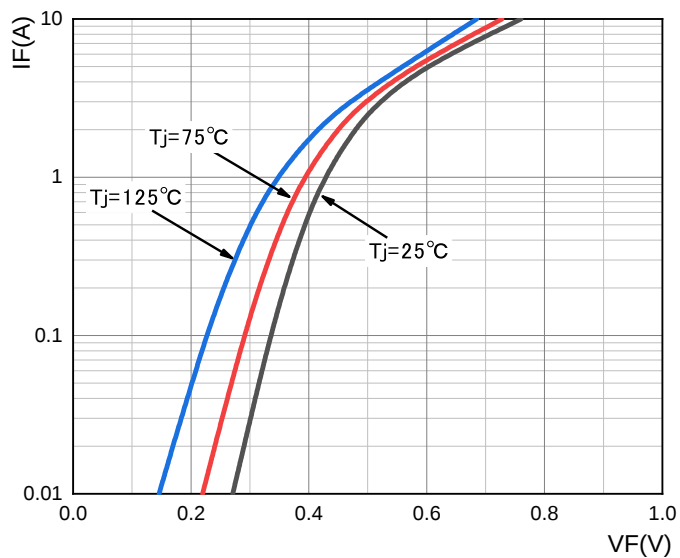


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



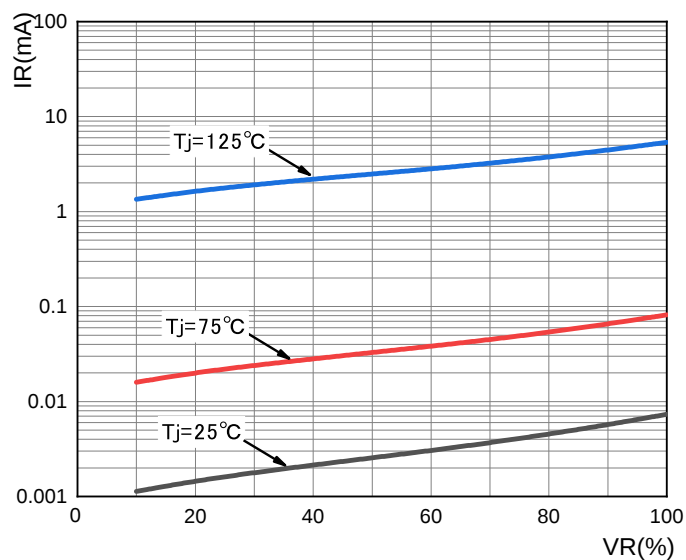
DSS32-DSS34

FIG.3: TYPICAL FORWARD CHARACTERISTICS



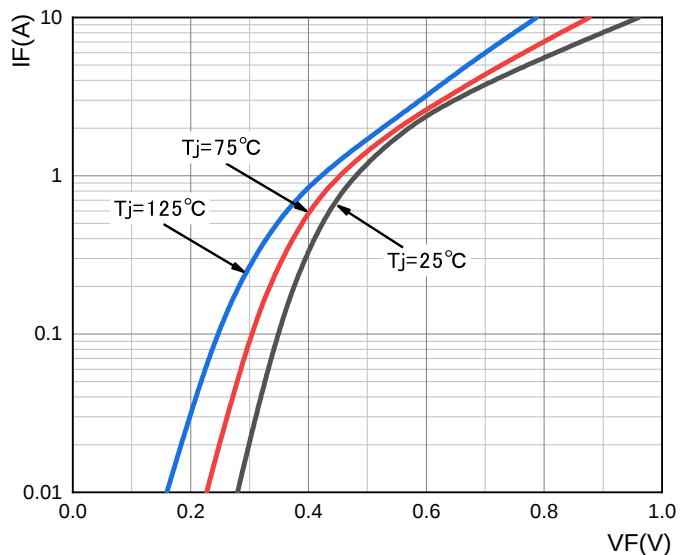
DSS32-DSS34

FIG.4: TYPICAL REVERSE CHARACTERISTICS



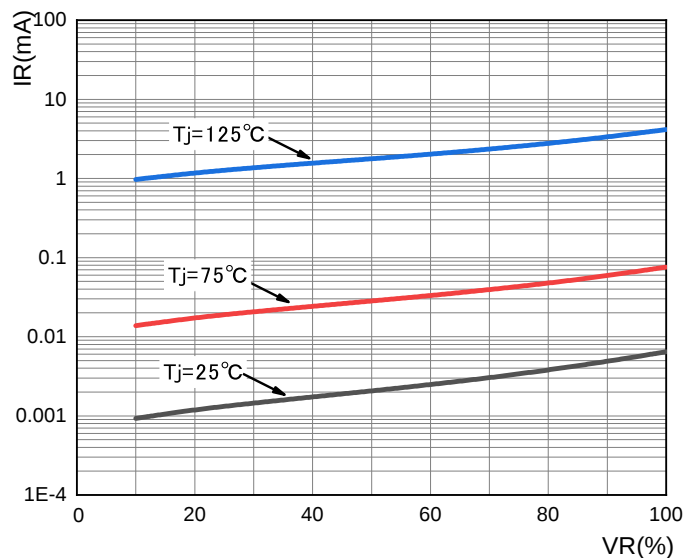
DSS35-DSS36

FIG.5: TYPICAL FORWARD CHARACTERISTICS



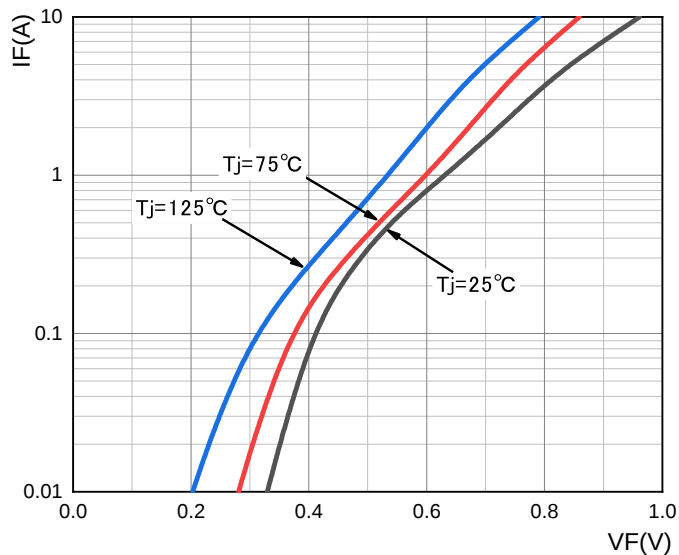
DSS35-DSS36

FIG.6: TYPICAL REVERSE CHARACTERISTICS



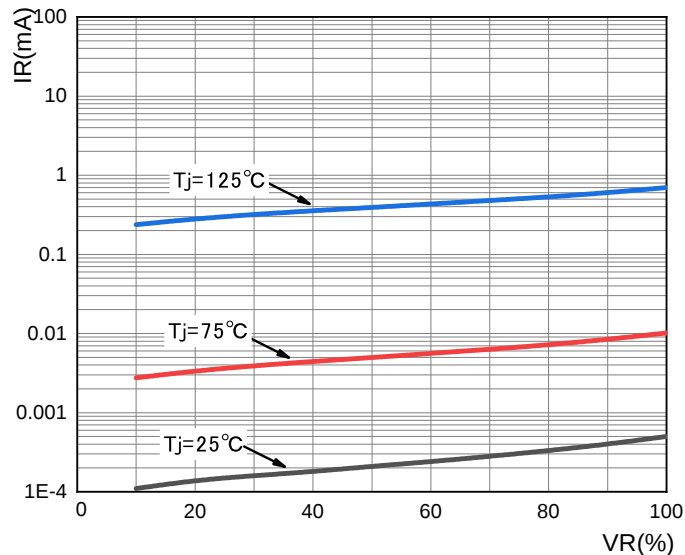
DSS38-DSS310

FIG.7: TYPICAL FORWARD CHARACTERISTICS



DSS38-DSS310

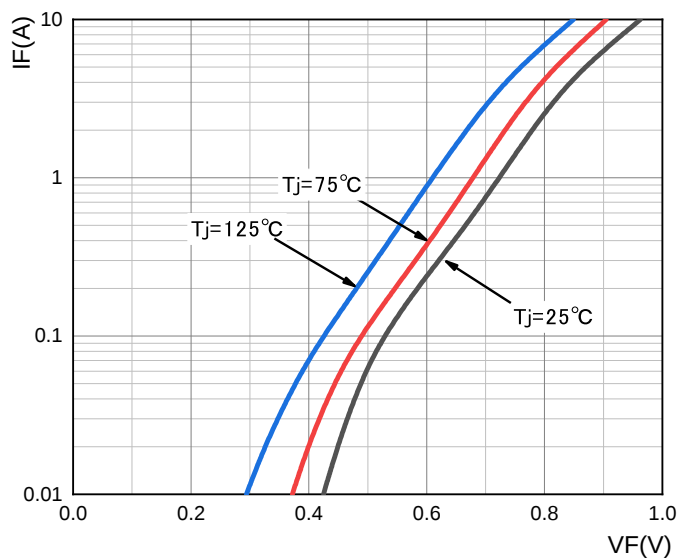
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

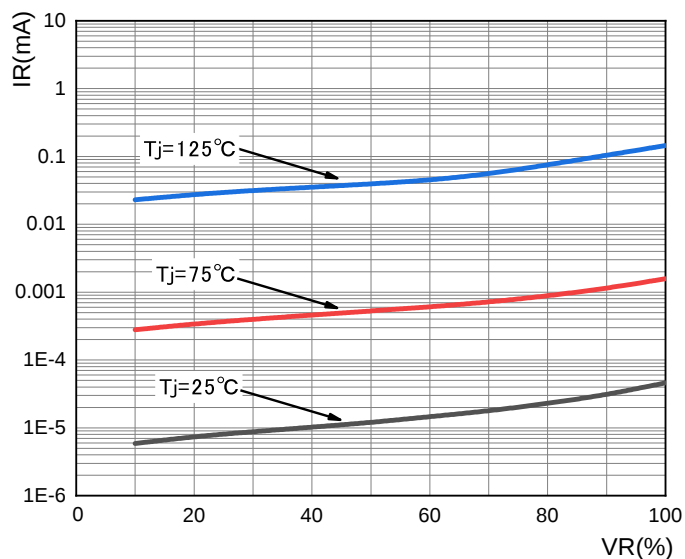
DSS315

FIG.9: TYPICAL FORWARD CHARACTERISTICS



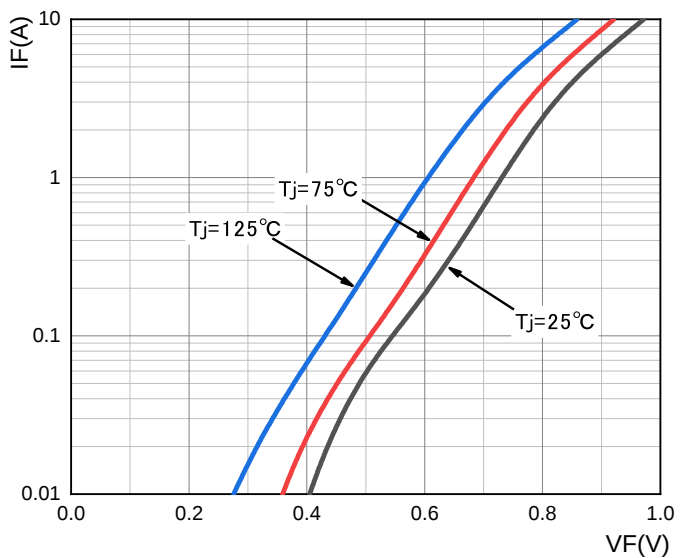
DSS315

FIG.10: TYPICAL REVERSE CHARACTERISTICS



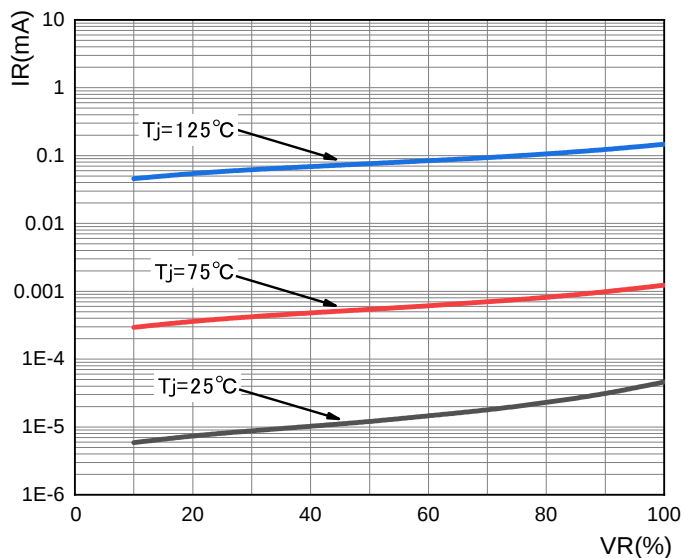
DSS320

FIG.11: TYPICAL FORWARD CHARACTERISTICS

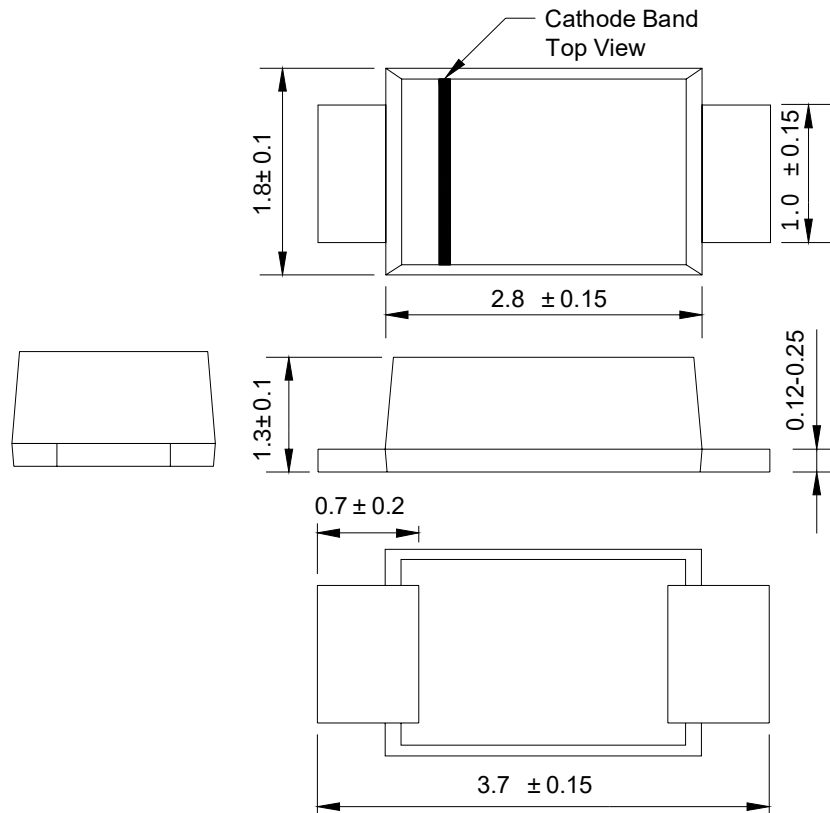


DSS320

FIG.12: TYPICAL REVERSE CHARACTERISTICS

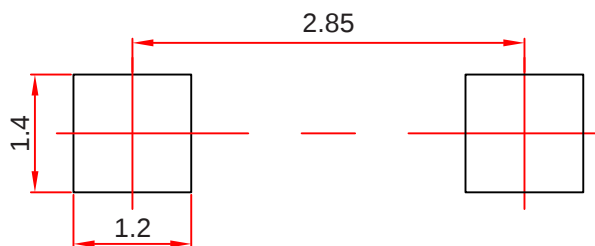


SOD-123FL Package Outline Dimensions



Dimensions in millimeters

SOD-123FL 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.

NOTICE

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

Reel Taping Specifications For Surface Mount Devices-SOD-123FL

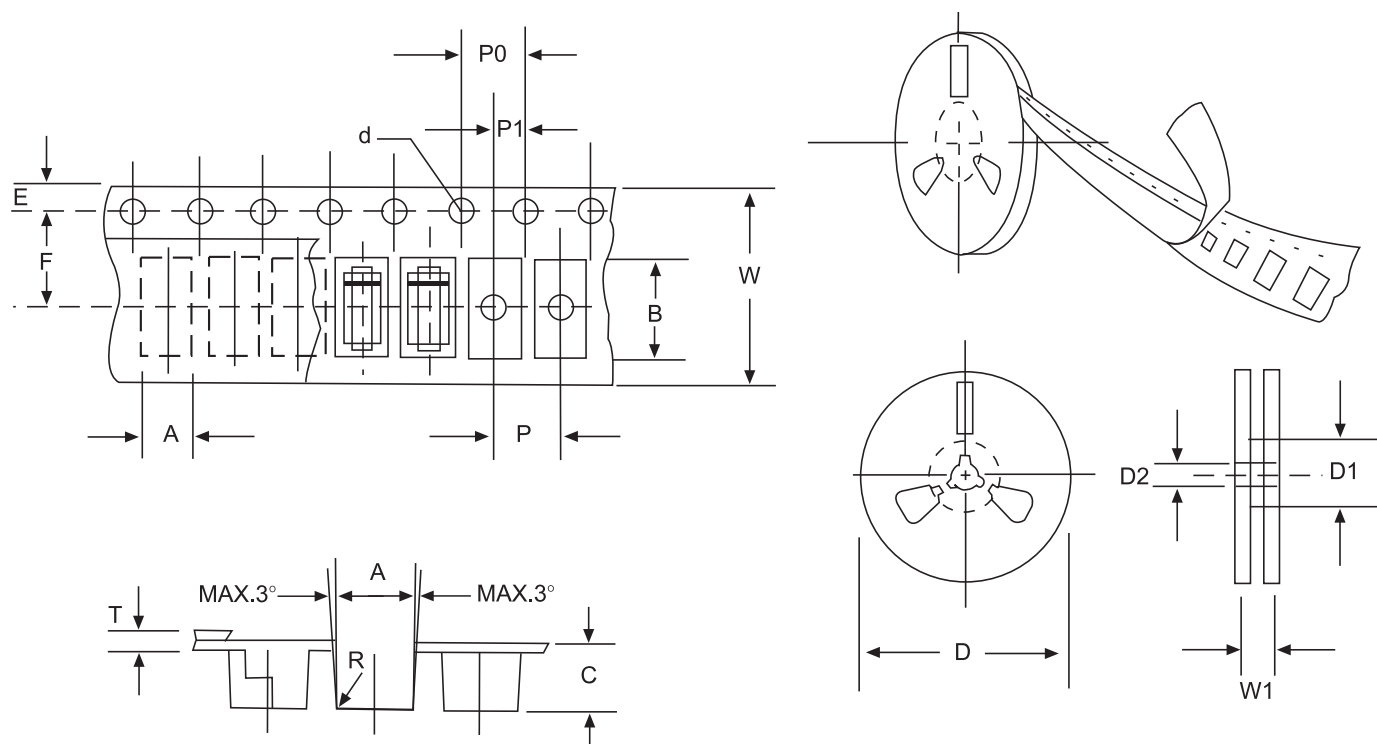


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SOD-123FLmm(inch)
Carrier width	A	2.05±0.1(0.081±0.004)
Carrier length	B	3.95±0.1(0.156±0.004)
Carrier depth	C	1.45±0.1(0.057±0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	178±2.0(7.0±0.079)
Reel inner diameter	D1	54±1.0(2.13±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Sprocket hole position	E	1.75±0.1(0.069±0.004)
Punch hole position	F	3.50±0.1(0.138±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	0.21±0.25(0.008±0.010)
Tape width	W	8.0±0.2(0.315±0.008)
Reel width	W1	10.0±2.0(0.394±0.079)

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