

## Bulk Packing

Package	Inner Pack	Inner Box (EA)	Inner Box (mm)	Carton (EA)	Carton Size (mm)	Gross Weight (Kg)-Approx.
R-1	Box	1,000	192x85x21	50,000	475x225x260	12.8
R-6	Box	200	300x77x39	4,800	360x325x295	12.8
DO-41(DO-204AL)	Box	1,000	192x85x21	50,000	475x220x260	18.2
DO-15(DO-204AC)	Box	500	192x85x21	25,000	475x220x260	11.8
DO-201AD(DO-27)	Box	500	300x77x39	12,000	475x220x260	16.0
TO-220AB	Tube	2,000	539*184*79	4,000	558x180x200	11.9
TO-220SGB	Tube	2,000	539x184x79	4,000	558x180x200	11.9
ITO-220AB	Tube	2,000	530x184x79	4,000	550x180x200	11.0
TO-220AC	Tube	2,000	539x184x79	4,000	558x180x200	11.9
TO-220SGC	Tube	2,000	539x184x79	4,000	558x180x200	11.9
ITO-220AC	Tube	2,000	530x184x79	4,000	550x180x200	11.0
4GBJ(20pcs/tube)	Tube	180	500x100x47	1,800	515x215x270	19.0
DF(50pcs/tube)	Tube	2,500	440x130x60	10,000	450x270x150	7.0
DFS(50pcs/tube)	Tube	5,000	440x130x60	20,000	450x270x150	11.0
GBP(35pcs/tube)	Tube	3,500	547x270x92	7,000	565x290x205	12.21
GBU(20pcs/tube)	Tube	1000	485x145x130	2,000	500x310x160	13.0
KBP	Box	500	198x198x32	7,000	405x210x270	12.0
KBL	Box	500	203x203x44	4,000	430x220x200	18.4
KBU	Box	400	233x213x55	2,400	450x250x190	17.98
WOM	Box	1000	253x184x62	7,000	405x210x270	12.0
GBL	Box	250	212x110x31	6,000	490x240x205	8.9

## Reel Packing

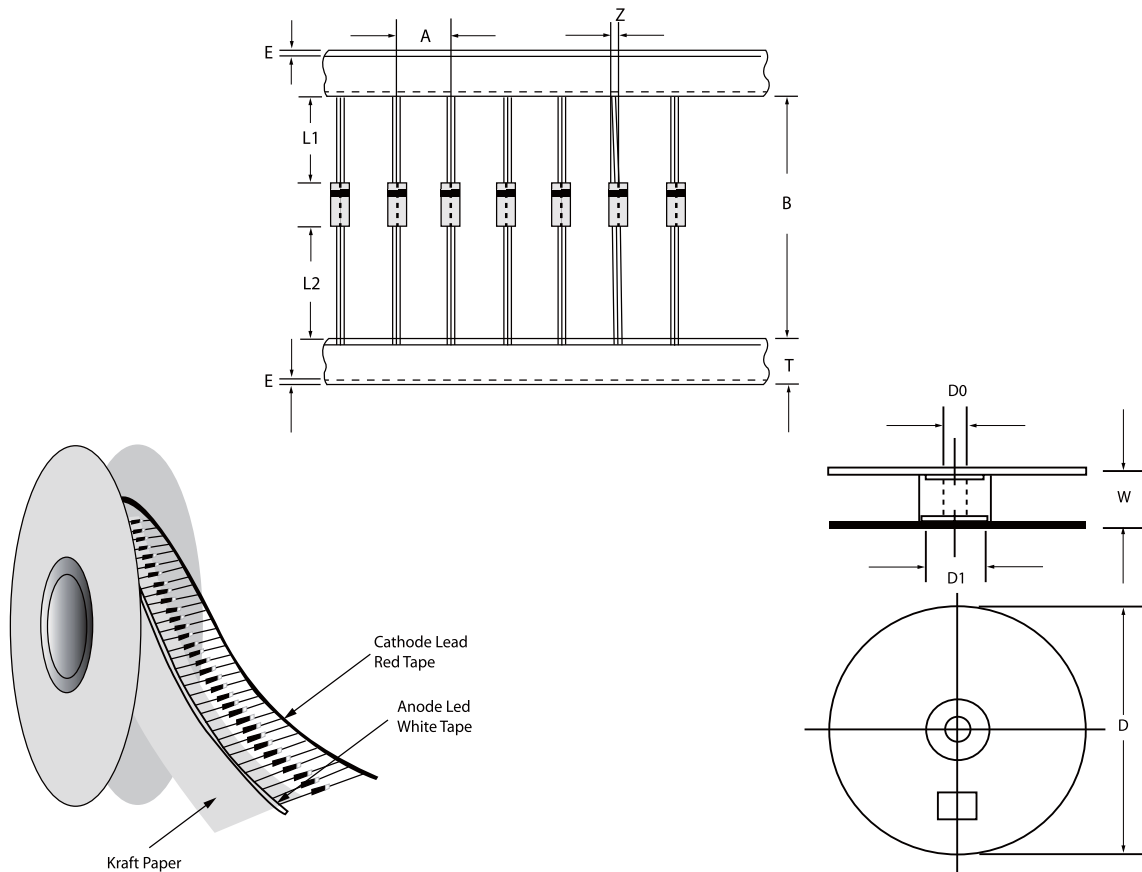
Package	Inner	Reel	Reel Dia.	Carton	Carton Size	Gross Weight
	Pack	(EA)	(mm)	(EA)	(mm)	(Kg)-Approx.
R-1	Reel	5,000	330	20,000	360x350x345	8.8
R-6	Reel	500	330	2,000	360x350x345	7.5
DO-41(DO-204AL)	Reel	5,000	330	20,000	360x350x345	9.9
DO-15(DO-204AC)	Reel	4,000	330	16,000	360x350x345	10.4
DO-201AD(DO-27)	Reel	1,250	330	5,000	360x350x345	8.5
EBS	Reel	5,000	330	80,000	118x118x115	16.0
ABS	Reel	5,000	330	80,000	400x370x360	17.0
DFS	Reel	1,500	330	24,000	400x370x360	16.0
MBS	Reel	3,000	330	48,000	380x365x400	14.0
SMA(DO-214AC)-13"	Reel	5,000	330	80,000	358x358x348	12.2
SMB(DO-214AA)-13"	Reel	3,000	330	48,000	358x358x348	11.9
SMC(DO-214AB)-13"	Reel	3,000	330	36,000	358x358x348	14.3
SMAF(DO-221AC)-13"	Reel	10,000	330	160,000	358x358x348	11.6
SOD-123F	Reel	3,000	178	240,000	403x297x412	9.4
SOD-123L	Reel	3,000	178	108,000	385x270x217	4.5
SOD-123	Reel	3,000	178	360,000	440x410x410	15
SOD-323	Reel	3,000	178	240,000	390x270x400	15.2
SOD-523	Reel	3,000	178	240,000	390x270x400	15.2
SOD-723	Reel	3,000	178	240,000	438x438x220	15.00
SOD-923	Reel	8,000	178	960,000	445x400x410	12.93
MINI-MELF	Reel	2,500	178	200,000	400x270x400	13.5
SOT-23	Reel	3,000	178	360,000	400x410x410	15.00
SOT-323	Reel	3,000	178	360,000	400x410x410	15.00
SOT-523	Reel	3,000	178	360,000	400x410x410	15.00
D2PAK-13"	Reel	800	330	6400	358x358x348	13.5
DPAK-13"	Reel	3000	330	30000	363x363x330	-
TO-277	Reel	5000	330	60000	345x357x365	13

## Ammo Box Packing

Package	Inner	BOX	Inner Box	Carton	Carton Size	Gross Weight
	Pack	(EA)	(mm)	(EA)	(mm)	(Kg)-Approx.
R-1 (52mm)	Reel	5,000	245x75x90	45,000	500x280x305	12.0
R-6 (52mm)	Reel	250	245x75x90	4,500	500x280x305	11.8
R-7	Reel	500	255x77x150	5000	400x260x295	12.0
DO-41(DO-204AL)-52mm	Reel	5,000	245x75x90	50,000	440x280x335	18.2
DO-15(DO-204AC)-52mm	Reel	3,000	245x75x90	30,000	440x280x335	14.0
DO-201AD(DO-27)-52mm	Reel	1,200	255x75x150	12,000	440x280x335	16.0
DO-34 / DO-35	Reel	5,000	248x80x75	100,000	406x335x257	15.7

## Axial Lead Reel Taping Specification

Component Outline	Component Pitch A	Inner Tape Pitch B	Cumulative Tolerance
	$\pm 0.5\text{mm}(0.02")$	$+1.5\text{mm}/-0.4\text{mm}(0.59")$	
R-1	5.0mm	52.4mm	2.0mm/20 pitch
DO-41(DO-204AL)	5.0mm	52.4mm	2.0mm/20 pitch
DO-15(DO-204AC)	5.0mm	52.4mm	2.0mm/20 pitch
DO-201AD(DO-27)	10.0mm	52.4mm	2.0mm/20 pitch
R-6	10.0mm	52.4mm	2.0mm/20 pitch
R-7	10.0mm	52+/-0.5mm	2.0mm/20 pitch

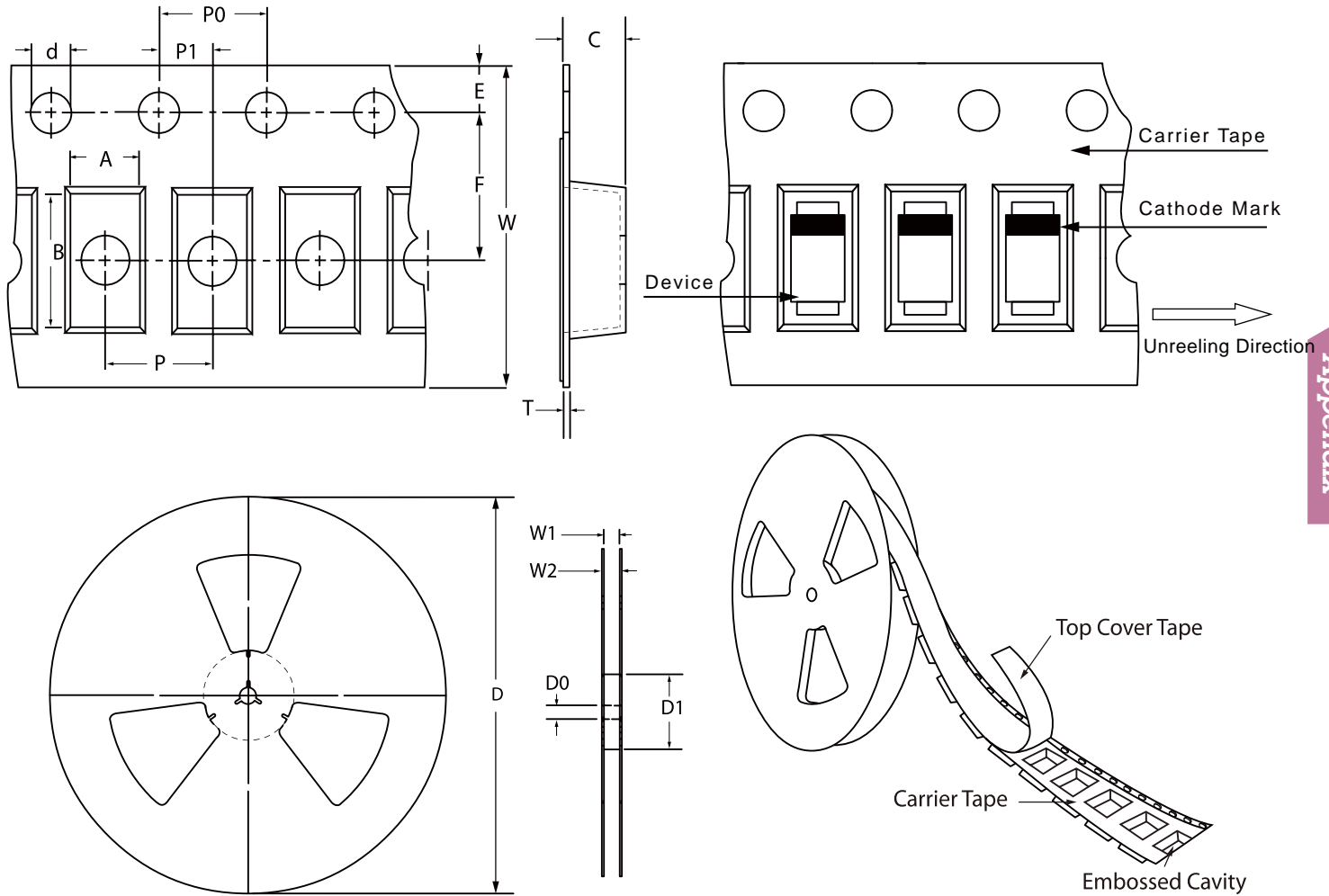


Item	Symbol	Specification(mm)	Specification(inch)
Component Alignment	Z	1.2max	0.048 max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8 max	0.032 max
Body eccentricity	L1-L2	1.0 max	0.040 max
Reel Outside diameter	D	330.0	13.0
Reel inner diameter	D1	85.7±5.0	3.375±0.197
Reel hole diameter	Do	30.0±5.0	1.181±0.197
Reel width	W	79.0±1.0	3.110±0.040

Notes:

1. Each component lead shall be sandwiched between tapes for a minimum of 3.2mm(0.126")
2. The reel width "W" for 26mm taping is 50.0±1.0mm(1.97"±0.04")

### SMD Reel Taping Specification (SOD Series)



Appendix

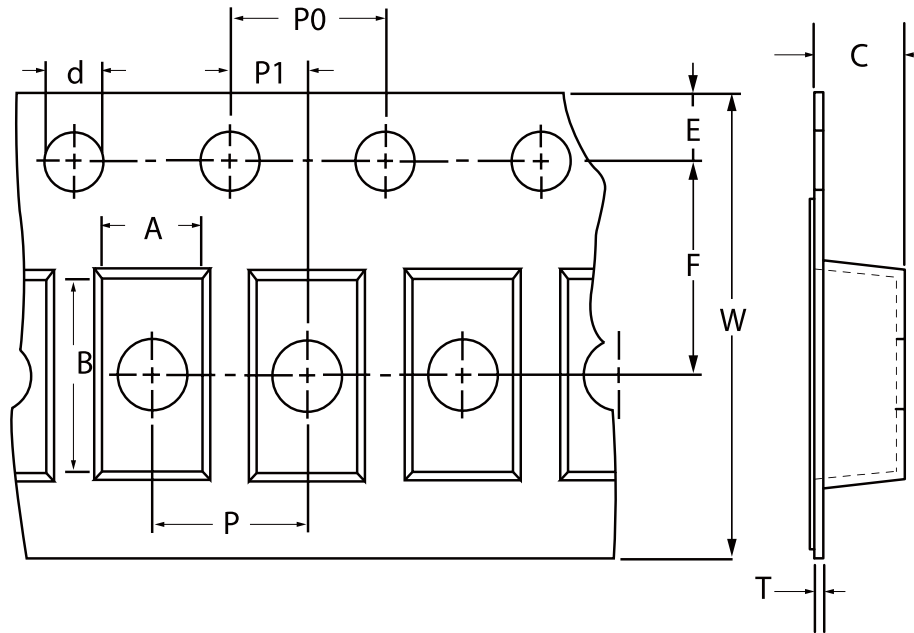
Unit:mm

ITEM	SYMBOL	SOD-123	SOD-123F	SOD-123L	SOD-323	MINI MELF
Carrier width	A	2.05±0.1	1.9±0.1	1.85±0.1	1.4±0.1	1.8max
Carrier length	B	4.5max	4.01±0.1	3.94±0.1	2.8±0.1	4.0max
Carrier depth	C	2.4max	1.32±0.1	1.58±0.1	1.0±0.1	1.8max
Sprocket hole	d	1.55±0.1	1.5±0.1	1.55±0.1	1.55±0.05	1.5±1
Reel outside diameter	D	178max	178max	178max	180+0/-3	178±2.0
Reel inner diameter	D1	50min.	60.3±1	50min.	60+1/-0	50min.
Feed Hole diameter	D2	13.0±0.2	13.3±0.1	13±0.2	13±0.2	13.0±0.5
Sprocket hole position	E	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
Punch hole position	F	3.5±0.1	3.5±0.05	3.5±0.05	3.5±0.05	5.5±0.1
Punch hole pitch	P	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1
Sprocket hole pitch	P0	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.1
Embossment center	P1	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.05
Overall tape thickness	T	0.4max	0.23±0.02	0.216(max)	0.6max	1.1max
Tape width	W	8.0±0.3	8+0.3/-0.1	8+0.2/-0.1	8.0±0.2	8.0±0.30
Reel width	W1	14.4±0.3	9.3±1	10.9(max)	9.0±0.3	10.4max

NOTE: Devices are packed in accordance with EIAJ stand ETX-7001 and specifications listed above.

# SMD Reel Taping Specification

Appendix



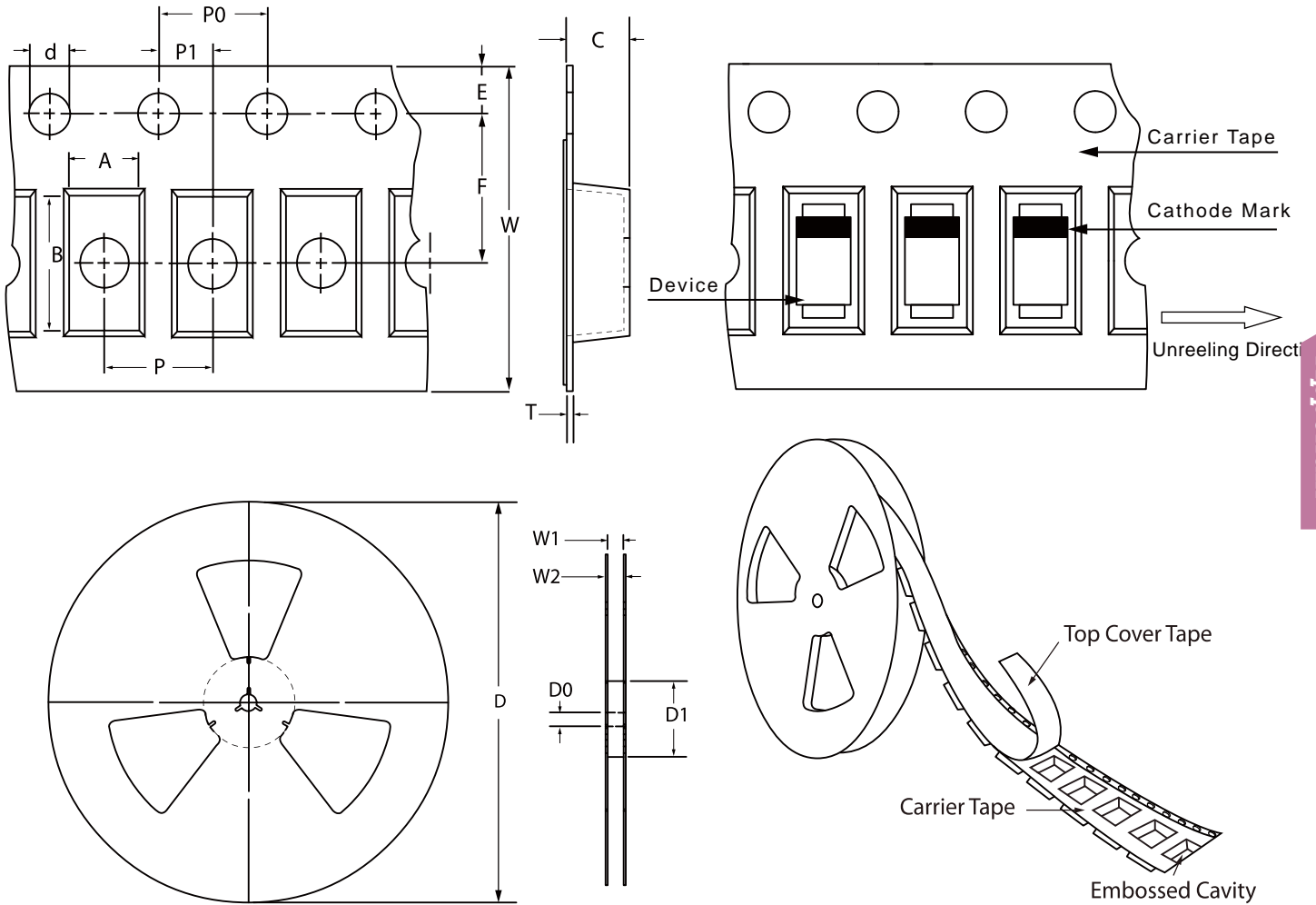
Unit:mm

ITEM	SYMBOL	SMA	SMB	SMC	SMAF	TO-277
		DO-214AC	DO-214AA	DO-214AB	DO-221AC	
Carrier width	A	2.9(max)	4.0(max)	6.3(max)	3±0.1	4.38(max)
Carrier length	B	5.9(max)	5.9(max)	8.6(max)	5.6±0.1	6.9(MAX)
Carrier depth	C	2.66(max)	3.0(max)	2.9(max)	1.2±0.1	1.4±0.1
Sprocket hole	d	1.50±0.1	1.50±0.1	1.50±0.1	1.50±0.1	1.50±0.1
Reel outside diameter	D	330±2.0	330±2.0	330±2.0	330±2.0	330±2.0
Feed hole diameter	D0	13.5±1	13.5±1	13.5±1	13.5±1	13.0±0.2
Reel inner diameter	D1	50 (min.)	50 (min.)	50 (min.)	50 (min.)	100 (min.)
Sprocket hole position	E	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1
Punch hole position	F	5.5±0.05	5.5±0.05	7.5±0.05	5.5±0.05	7.5±0.05
Sprocket hole pitch	P	4.0±0.1	8.0±0.1	8.0±0.1	4.0±0.1	8.0±0.1
Sprocket hole pitch	Po	4.0±0.1	4.0±0.1	4.0±0.1	4.0±0.05	4.0±0.1
Embossment center	P1	2.0±0.05	2.0±0.05	2.0±0.1	2.0±0.05	2.0±0.10
Overall tape thickness	T	0.6 (max)	0.6 (max)	0.6 (max)	0.25±0.05	0.6 (max)
Tape width	W	12.0±0.3	12.0±0.3	16.0±0.3	12.0±0.2	16.0±0.3
Reel width	W2	18.4 (max)	18.4 (max)	22.4 (max)	18.4 (max)	20(max)
Reel width	W1	14.4 (max)	14.4 (max)	18.4 (max)	14.4 (max)	16(max)

Notes:

Devices are packed in accordance with EIA stand RS-481-A and specifications given above available for SMD device

### SMD Reel Taping Specification



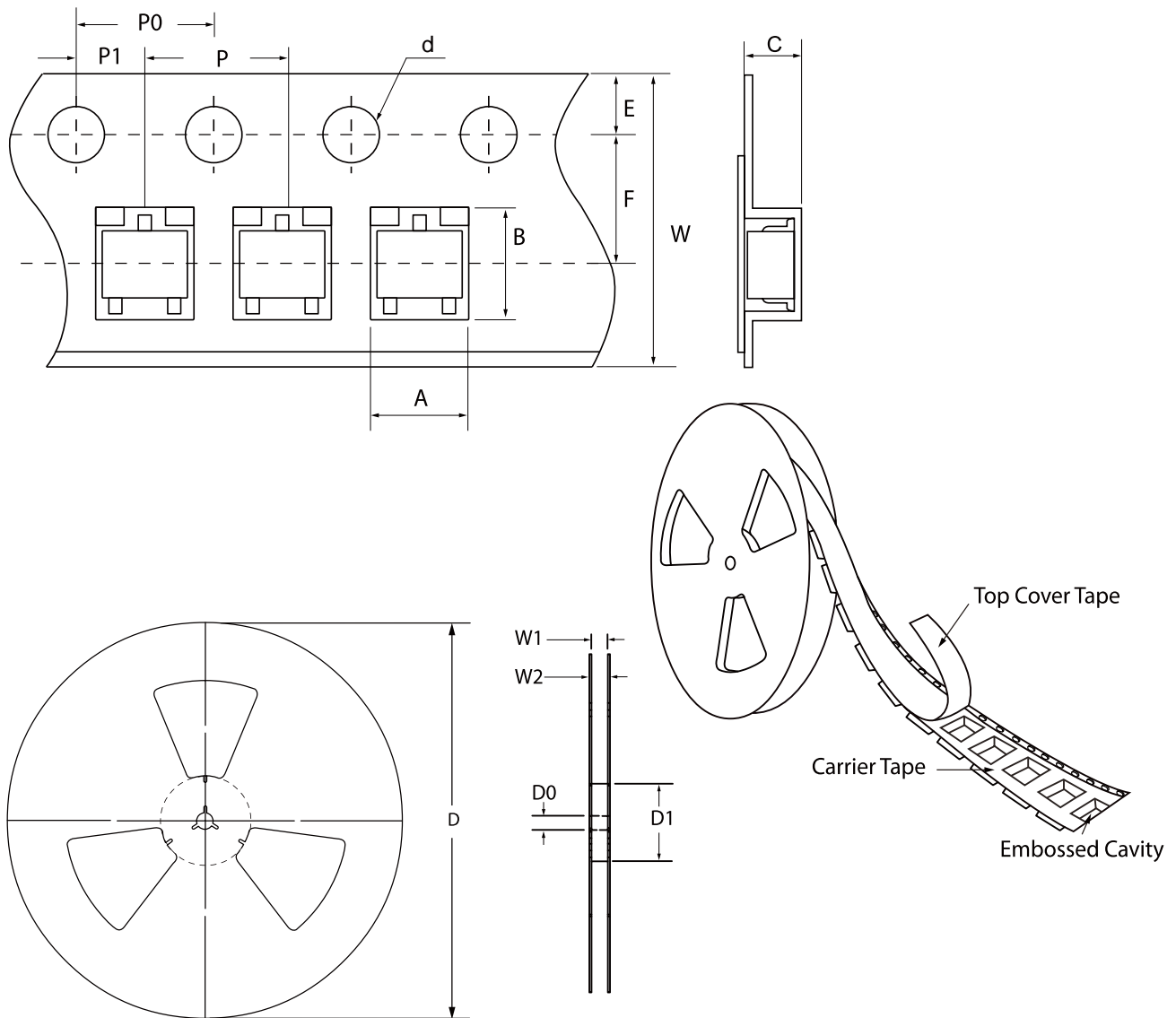
Appendix

Unit:mm

ITEM	SYMBOL	EBS	ABS/ABH	MBS	DFS	D2PAK	DO-218
Carrier width	A	5.4±0.1	5.31±0.1	4.90±0.01	8.64±0.1	10.7±0.1	10.80±0.10
Carrier length	B	6.7±0.1	6.68±0.1	7.24±0.1	10.41±0.1	16.3±0.1	16.4±0.10
Carrier depth	C	1.65±0.1	1.59±0.1	--	--	5.0±0.1	6.0±0.10
Sprocket hole	d	1.55±0.05	1.55±0.05	1.55±0.05	1.55±0.05	1.55±0.05	1.50±0.10
Reel outside diameter	D	330±2.0	330	330±2.0	330±2.0	330±2.0	330+0/-3
Feed hole diameter	D0	13.5±1	14	13.0±0.2	13.0±0.2	13.5±1	16.0±1.0
Reel inner diameter	D1	50 (min.)	75	50 (min.)	50 (min.)	100 (min.)	101.5±1.0
Sprocket hole position	E	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±0.1	1.75±.10
Punch hole position	F	5.5±0.05	5.5±0.05	5.5±0.05	7.5±0.05	11.5±0.1	11.50±0.10
Sprocket hole pitch	P	8.0±0.1	8.0±0.1	--	--	16.0±0.1	16.0±0.10
Sprocket hole pitch	Po	4.0±0.1	4.00±0.1	--	--	4.0±0.1	4.00±0.10
Embossment center	P1	2.0±0.05	2.0±0.05	2.0±0.05	2.0±0.10	2.0±0.1	2.00±0.10
Overall tape thickness	T	0.25±0.05	0.3±0.02	0.30	0.32	0.3±0.05	0.40±0.05
Tape width	W	12.0±0.3	12.0±0.15	12.0±0.3	16.0±0.3	24.0±0.3	24.0+0.3/-0.1
Reel width	W2	18.4 (max)	18.1	14.4 (max)	18.4 (max)	-	-
Reel width	W1	14.4 (max)	13.5	-	-	24.2 (max)	25±0.3

Notes:

Devices are packed in accordance with EIA stand RS-481-A and specifications given above available for SMD device



Unit:mm

ITEM	SYMBOL	SOT-23	SOT-323	SC-59
Carrier width	A	3.1±0.1	2.2±0.1	3.1±0.1
Carrier length	B	2.85±0.1	2.4±0.1	3.2±0.1
Carrier depth	C	1.40±0.1	1.55±0.1	1.35±0.1
Sprocket hole	d	1.5+0.1/-0	1.5+0.1/-0	1.5+0.1/-0
Reel outside diameter	D	180+0/-3	180+0/-3	180+0/-3
Reel inner diameter	D1	60+1/-0	60+1/-0	60+1/-0
Feed Hole diameter	D2	13.0±0.2	13±0.2	13±0.2
Sprocket hole position	E	1.75±0.1	1.75±0.1	1.75±0.1
Punch hole position	F	3.5±0.05	3.5±0.05	3.5±0.05
Punch hole pitch	P	4.0±0.1	4.0±0.1	4.0±0.1
Sprocket hole pitch	P0	4.0±0.1	4.0±0.1	4.0±0.1
Embossment center	P1	2.0±0.05	2.0±0.05	2.0±0.05
Tape width	W	8.0±0.2	8.0±0.2	8.0±0.2
Reel width	W1	9.0±0.3	9.0±0.3	9.0±0.3

NOTE: 1.Devices are packed in accordance with EIAJ stand ETX-7001 and specifications listed above.