

Tape and Reel Packaging for Surface Mount Components

Rev. V20

1.0 Introduction

MACOM supplies integrated circuits, diodes, and related surface mount components in tape wound on standard 7-inch and 13-inch diameter reels. This application note documents the reel and tape dimensions and the orientation of the components within the tape cavities for many of our most popular package styles.

Packages Covered in This Application Note:

Package Type	Package Type
1 mm X1DFN-6LD	LSM3
1.2 x 1.5 mm TDFN-6LD (0.5 mm pitch)	LSM6
1.5 x 1.2 mm TDFN-6LD (0.4 mm pitch)	MSOP-8, MSOP-8EP
2 mm PDFN-8LD	MSOP-10
2 mm STDFN-8LD	ODS-120 (ceramic)
2 mm STQFN-12LD	ODS-186 (ceramic)
2 x 2.5 mm STQFN-14LD	ODS-1056 (ceramic)
3 mm PQFN-12LD	ODS-1072 (MELF)
3 mm PQFN-12LD (1.1 mm Height)	ODS-1079 (MELF)
3 mm PQFN-16LD	ODS-1091 (MELF)
3 x 6 mmPDFN-14LD	ODS-1269 (GaAs flip-chip)
4 mm PQFN-16LD	ODS-1294 (surmount)
4 mm PQFN-20LD	ODS-1295 (surmount)
4 mm PQFN-24LD	ODS-1305 (GaAs flip-chip)
4 x 6 mm PQFN-32LD	ODS-1306 (surmount)
4 x 7 mm PQFN-36LD	ODS-1402 (GaAs flip-chip)
5 mm PQFN-20LD	ODS-1411 (GaAs flip-chip)
5 mm PQFN-28LD	ODS-1500 (GaAs flip-chip)
5 mm PQFN-32LD	QSOP-16, QSOP-16EP
5 x 6 mm PQFN-32LD	QSOP-24
5 x 7 mm PQFN-40LD	QSOP-28
6 x 5 mm PDFN-8LD	R-1, R-4, R-5, R-15
6 x 6 mm PQFN-20LD	SC70-3LD
6 x 7 mm PQFN-37LD	SC70-6LD
7 mm LGA-16	SC-79
8 mm BGA	SM-1
15 mm BGA	SM-2
BD-1, BD-2, BD-3 (Bumped Die)	SM-3
CR-5	SM-4 (same as SM-2)
LCC1	SM-7-1
LSM1	SM-20
LSM2	SM-22

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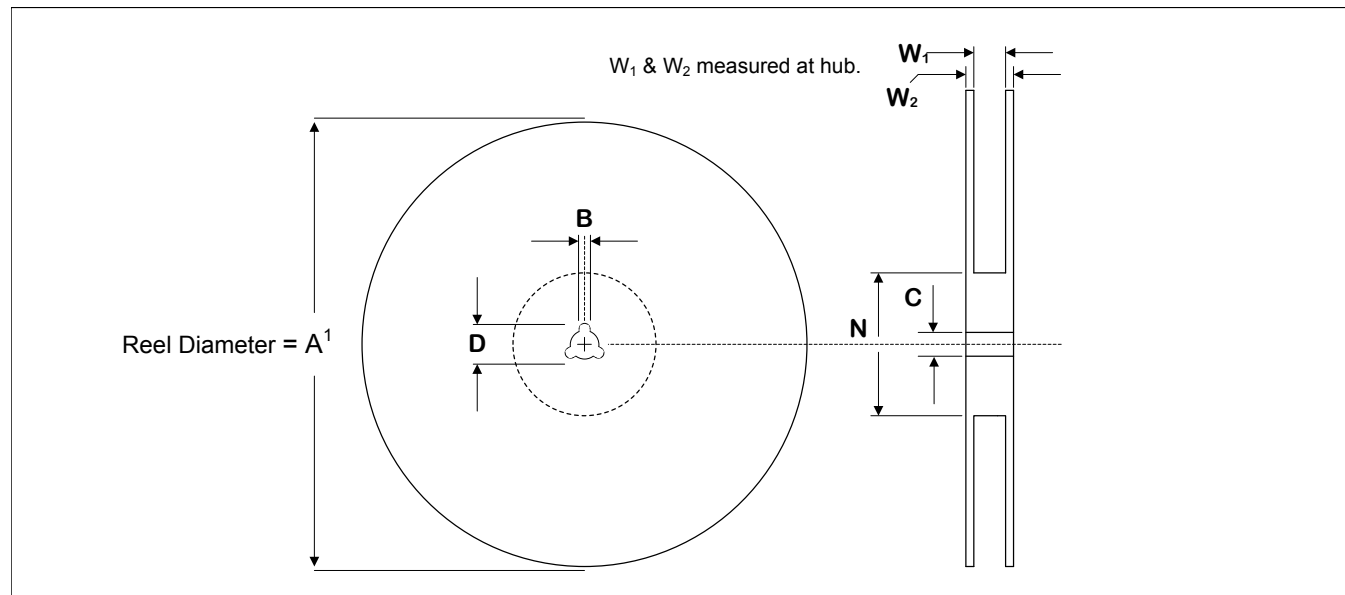
Packages Covered in This Application Note (cont.):

Package Type	Package Type
SM-23 (same as SM-1)	SSOP-24
SM-24	SSOP-28
SM-26	TSSOP-16, TSSOP-16EP
SM-28	
SM-41	
SM-44	
SM-46	
SM-52	
SM-55	
SM-68 (same as SM-44)	
SM-69 (same as SM-1)	
SM-74 (same as SM-2)	
SM-87 (same as SM-1)	
SM-89 (same as SM-1)	
SM-106	
SM-108 (same as SM-2)	
SM-134 (same as SM-1)	
SOD-323	
SOIC-8	
SOIC-14	
SOIC-16	
SOIC-16 Wide Body	
SOIC-24 Wide Body	
SOT-23	
SOT-25 (same as SOT-23 (5LD))	
SOT-26 (same as SOT-23 (6LD))	
SOT-89	
SOT-143	
SOW-16 (same as SOIC-16 Wide Body)	
SOW-24 (same as SOIC-24 Wide Body)	
SSOP-8	
SSOP-20	

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2.0 Reel Dimensions



Reel Dimensions in mm

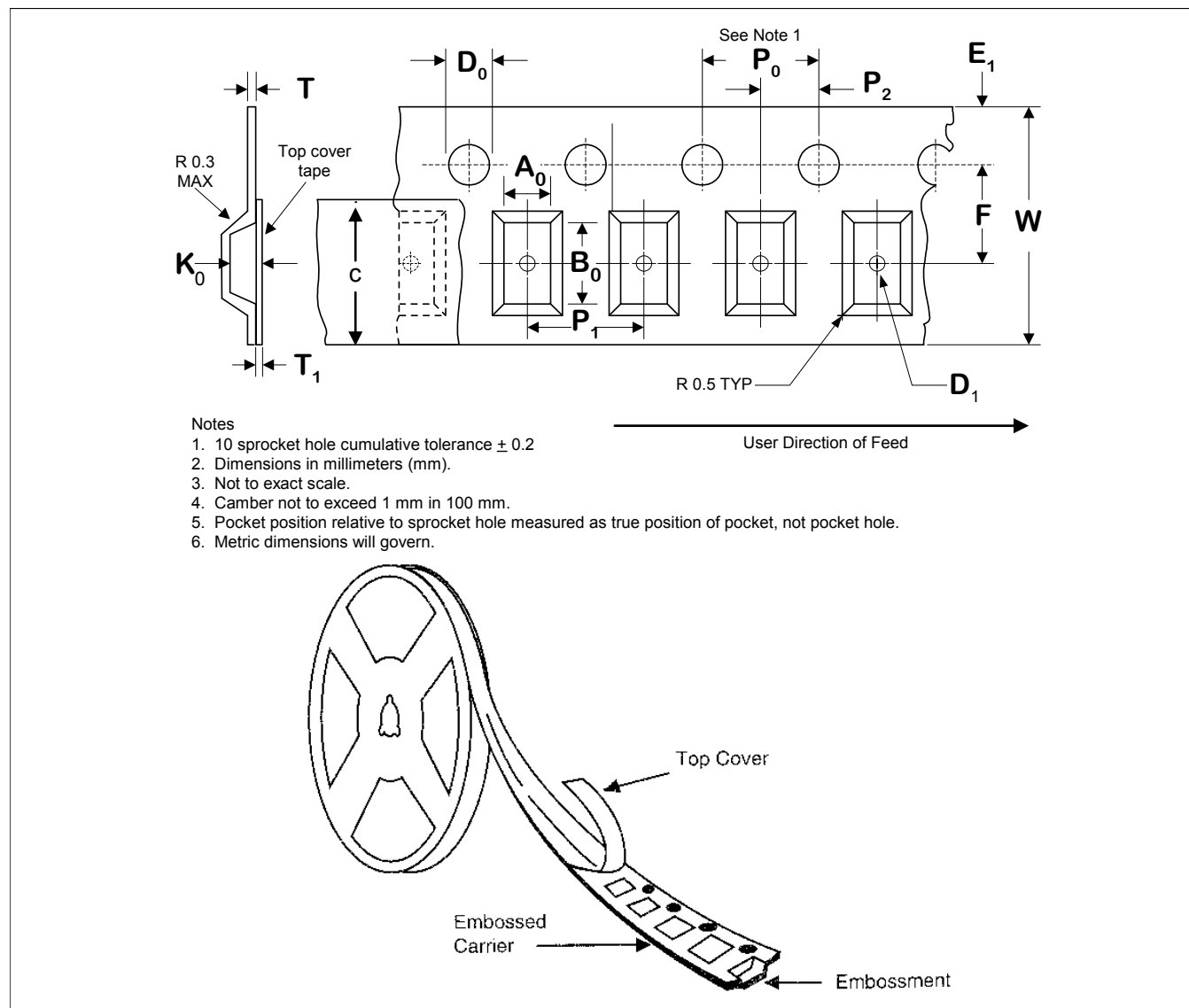
W Tape Width ²	W ₁ (+2.0/-0.0)	W ₂ (max.)	N (min.)		B (min.)	C (+0.5/-0.2)	D (min.)
			A = 7 inch	A = 13 inch			
8	8.4	14.4	50	N/A	1.5	13	20.2
12	12.4	18.4	50	100	1.5	13	20.2
16	16.4	22.4	50	100	1.5	13	20.2
24	24.4	30.4	N/A	100	1.5	13	20.2
32	32.4	38.4	N/A	100	1.5	13	20.2

1. See section 5.0 Reel Diameter Dimensions.
2. See section 3.0 Tape Dimensions.

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3.0 Tape Dimensions



Tape Dimensions

Tape Dimensions	Description	Symbol	Size (mm)
Perforation	Diameter	D_0	$1.5 +0.1 / -0.0$
	Pitch	P_0	4 ± 0.1
	Position	E_1	1.75 ± 0.1
	Thickness	T	0.25 ± 0.1
Cover Tape	Thickness	T_1	0.06 ± 0.02

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1 mm X1DFN-6LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	1.2 + 0.0/-0.05
	Width	B ₀	1.2 + 0.0/-0.05
	Depth	K ₀	0.55 ± 0.05
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.1
Cover Tape	Width	C	5.5 ± 0.1
Carrier Tape	Width	W	8 ± 0.3

1.2 x 1.5 mm TDFN-6LD (0.5 mm Lead Pitch) & 1.5 x 1.2 mm TDFN-6LD (0.4 mm Lead Pitch)

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	1.75 ± 0.1
	Width	B ₀	1.35 ± 0.1
	Depth	K ₀	1.02 ± 0.1
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

2 mm PDFN-8LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	2.42 ± 0.1
	Width	B ₀	2.42 ± 0.1
	Depth	K ₀	1.1 ± 0.1
	Pitch	P ₁	4 ± 0.1
	Diameter	D ₁	1 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	5.5 ± 0.1
Cover Tape	Width	C	9.2 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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2 mm STDFN-8LD, 2 mm STQFN-12LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	2.3 ± 0.1
	Width	B ₀	2.3 ± 0.1
	Depth	K ₀	0.75 ± 0.1
	Pitch	P ₁	4 ± 0.1
	Diameter	D ₁	1 ± 0.25
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.5 ± 0.1
Carrier Tape	Width	W	8 ± 0.3

2 x 2.5 mm STQFN-14LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	2.2 ± 0.1
	Width	B ₀	2.7 ± 0.1
	Depth	K ₀	0.7 ± 0.05
	Pitch	P ₁	4 ± 0.1
	Diameter	D ₁	0.7 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.1
Cover Tape	Width	C	5.5 ± 0.1
Carrier Tape	Width	W	8 ± 0.3

3 mm PQFN-12LD, 3 mm PQFN-16LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.3 ± 0.1
	Width	B ₀	3.3 ± 0.1
	Depth	K ₀	1.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	5.5 ± 0.1
Cover Tape	Width	C	9.2 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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3 mm PQFN-12LD (1.1 mm Height)

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.3 ± 0.1
	Width	B ₀	3.3 ± 0.1
	Depth	K ₀	1.3 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	5.5 ± 0.05
Cover Tape	Width	C	9.2 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

3 x 6 mm PDFN-14LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.25 ± 0.1
	Width	B ₀	6.35 ± 0.1
	Depth	K ₀	1.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

4 mm PQFN-16LD, 4 mm PQFN-20LD, 4 mm PQFN-24LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	4.35 ± 0.1
	Width	B ₀	4.35 ± 0.1
	Depth	K ₀	1.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	5.5 ± 0.1
Cover Tape	Width	C	9.2 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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4 x 6 mm PQFN-32LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	4.2 ± 0.1
	Width	B ₀	6.2 ± 0.1
	Depth	K ₀	1.2 ± 0.1
	Pitch	P ₁	8 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

4 x 7 mm PQFN-36LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	4.2 ± 0.1
	Width	B ₀	7.2 ± 0.1
	Depth	K ₀	1.2 ± 0.1
	Pitch	P ₁	8 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

5 mm PQFN-20LD, 5 mm PQFN-28LD, 5 mm PQFN-32LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	5.25 ± 0.1
	Width	B ₀	5.25 ± 0.1
	Depth	K ₀	1.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	5.5 ± 0.1
Cover Tape	Width	C	9.2 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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5 x 6 mm PQFN-32LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	5.3 ± 0.1
	Width	B ₀	6.3 ± 0.1
	Depth	K ₀	1.2 ± 0.1
	Pitch	P ₁	8 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

5 x 7 mm PQFN-40LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	5.5 ± 0.1
	Width	B ₀	7.5 ± 0.1
	Depth	K ₀	1.5 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

6 x 5 mm PDFN-8LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.5 ± 0.1
	Width	B ₀	5.5 ± 0.1
	Depth	K ₀	1.4 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	5.5 ± 0.05
Cover Tape	Width	C	9.3 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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6 x 6 mm PQFN-20LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.3 ± 0.1
	Width	B ₀	6.3 ± 0.1
	Depth	K ₀	1.4 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

6 x 7 mm PQFN-37LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.4 ± 0.1
	Width	B ₀	7.4 ± 0.1
	Depth	K ₀	1.2 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

7 mm LGA-16LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	7.4 ± 0.1
	Width	B ₀	7.4 ± 0.1
	Depth	K ₀	1.9 ± 0.1
	Pitch	P ₁	12 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

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8 mm BGA

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	8.3 ± 0.1
	Width	B ₀	8.3 ± 0.1
	Depth	K ₀	2.7 ± 0.1
	Pitch	P ₁	12 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

15 mm BGA

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	15.3 ± 0.1
	Width	B ₀	15.3 ± 0.1
	Depth	K ₀	3.8 ± 0.1
	Pitch	P ₁	20 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	11.5 ± 0.1
Cover Tape	Width	C	21 ± 0.1
Carrier Tape	Width	W	24 ± 0.3

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BD-1

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	0.82 ± 0.05
	Width	B ₀	0.82 ± 0.05
	Depth	K ₀	0.395 ± 0.05
	Pitch	P ₁	4 ± 0.1
	Pocket Hole Diameter	D ₁	0.35 ± 0.05
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.3 ± 0.1
Carrier Tape	Width	W	8 ± 0.1

BD-2

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	1.1 ± 0.05
	Width	B ₀	1.25 ± 0.05
	Depth	K ₀	0.298 ± 0.028
	Pitch	P ₁	4 ± 0.1
	Pocket Hole Diameter	D ₁	0.5 ± 0.05
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.3 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

BD-3

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	0.58 ± 0.05
	Width	B ₀	0.7 ± 0.05
	Depth	K ₀	0.36 ± 0.05
	Pitch	P ₁	4 ± 0.1
	Pocket Hole Diameter	D ₁	N/A
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.3 ± 0.1
Carrier Tape	Width	W	8 ± 0.1

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CR-5

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	9.02 ± 0.1
	Width	B ₀	9.91 ± 0.1
	Depth	K ₀	2.03 ± 0.1
	Pitch	P ₁	12 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	11.5 ± 0.1
Cover Tape	Width	C	21 ± 0.1
Carrier Tape	Width	W	24 ± 0.3

LCC1

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	10.47
	Width	B ₀	11.15
	Depth	K ₀	3.38
	Pitch	P ₁	16
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	11.5
Carrier Tape	Width	W	24

LSM1

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	13
	Width	B ₀	13
	Depth	K ₀	4.7
	Pitch	P ₁	16
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	11.5
Carrier Tape	Width	W	24

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LSM2

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	10.08
	Width	B ₀	15.29
	Depth	K ₀	3.94
	Pitch	P ₁	16
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	11.5
Carrier Tape	Width	W	24

LSM3

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	10.97
	Width	B ₀	12.62
	Depth	K ₀	4.75
	Pitch	P ₁	16
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	11.5
Carrier Tape	Width	W	24

LSM6

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	20.5
	Width	B ₀	15
	Depth	K ₀	4.1
	Pitch	P ₁	24
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	11.5
Carrier Tape	Width	W	24

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MSOP-8, MSOP-8EP, MSOP-10

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	5.3 ± 0.1
	Width	B ₀	3.4 ± 0.1
	Depth	K ₀	1.4 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	5.5 ± 0.1
Cover Tape	Width	C	9.2 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

ODS-120

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	1.42 - 1.79
	Width	B ₀	1.29 - 1.52
	Depth	K ₀	1.42 - 1.78
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

ODS-186

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	9.32 ± 0.1
	Width	B ₀	2.7 ± 0.1
	Depth	K ₀	1.37 ± 0.1
	Pitch	P ₁	12 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.1

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ODS-1056

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	2 ± 0.1
	Width	B ₀	2 ± 0.1
	Depth	K ₀	1.19 ± 0.1
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

ODS-1072

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	2.54 ± 0.1
	Width	B ₀	3.56 ± 0.1
	Depth	K ₀	2.54 ± 0.1
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	5.5 ± 0.05
Cover Tape	Width	C	9.3 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

ODS-1079

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.2 ± 0.1
	Width	B ₀	3.2 ± 0.1
	Depth	K ₀	3.12 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	5.5 ± 0.05
Cover Tape	Width	C	9.3 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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ODS-1091

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	4.19 ± 0.1
	Width	B ₀	5.38 ± 0.1
	Depth	K ₀	4.06 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	5.5 ± 0.05
Cover Tape	Width	C	9.3 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

ODS-1294,1295,1306

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	0.64 ± 0.05
	Width	B ₀	1.12 ± 0.05
	Depth	K ₀	0.3 ± 0.05
	Pitch	P ₁	4.0 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2.0 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8.0 +0.30/-0.1

ODS-1305,1269

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	0.46 ± 0.03
	Width	B ₀	0.79 ± 0.03
	Depth	K ₀	0.28 ± 0.03
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

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ODS-1402,1411,1500

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	0.47 ± 0.03
	Width	B ₀	0.84 ± 0.03
	Depth	K ₀	0.31 ± 0.03
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

QSOP-16, QSOP-16EP

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.8 ± 0.1
	Width	B ₀	5.4 ± 0.1
	Depth	K ₀	1.6 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

QSOP-24

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.5 ± 0.1
	Width	B ₀	9 ± 0.1
	Depth	K ₀	2.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

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QSOP-28

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.5 ± 0.1
	Width	B ₀	10.3 ± 0.1
	Depth	K ₀	2.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

R-1, R-4, R-5, R-15

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	12.5 ± 0.1
	Width	B ₀	12.9 ± 0.1
	Depth	K ₀	6.1 ± 0.1
	Pitch	P ₁	16 ± 0.1
Carrier Tape	Width	W	24 ± 0.3

SC70-3LD, SC70-6LD

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	2.25 ± 0.1
	Width	B ₀	2.4 ± 0.1
	Depth	K ₀	1.2 ± 0.1
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	3.5 ± 0.1
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 ± 0.3

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SC-79

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	0.9 ± 0.05
	Width	B ₀	1.94 ± 0.05
	Depth	K ₀	0.73 ± 0.05
	Pitch	P ₁	4 ± 0.05
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

SM-1, SM-23, SM-69, SM-87, SM-89, SM-134

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	7 ± 0.1
	Width	B ₀	8.5 ± 0.1
	Depth	K ₀	5.3 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

SM-2, SM-4, SM-74, SM-108

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	10.26 ± 0.1
	Width	B ₀	13.46 ± 0.1
	Depth	K ₀	6.1 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	24 ± 0.3

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SM-3

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	20.5 ± 0.1
	Width	B ₀	20.5 ± 0.1
	Depth	K ₀	5.3 ± 0.1
	Pitch	P ₁	24 ± 0.1
Carrier Tape	Width	W	32 ± 0.3

SM-7-1

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	16.3 ± 0.1
	Width	B ₀	21.4 ± 0.1
	Depth	K ₀	5.6 ± 0.1
	Pitch	P ₁	24 ± 0.1
Carrier Tape	Width	W	32 ± 0.3

SM-20

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	8.1 ± 0.1
	Width	B ₀	15.4 ± 0.1
	Depth	K ₀	7.1 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	24 ± 0.3

SM-22

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	4.3 ± 0.1
	Width	B ₀	5 ± 0.1
	Depth	K ₀	2.8 ± 0.1
	Pitch	P ₁	8 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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SM-24

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	10.5 ± 0.1
	Width	B ₀	8.28 ± 0.1
	Depth	K ₀	5.5 ± 0.1
	Pitch	P ₁	16 ± 0.1
Carrier Tape	Width	W	24 ± 0.3

SM-26

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	12.1 ± 0.1
	Width	B ₀	19.8 ± 0.1
	Depth	K ₀	5.5 ± 0.1
	Pitch	P ₁	16 ± 0.1
Carrier Tape	Width	W	32 ± 0.3

SM-28

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	12.1 ± 0.1
	Width	B ₀	21.1 ± 0.1
	Depth	K ₀	6.5 ± 0.1
	Pitch	P ₁	24 ± 0.1
Carrier Tape	Width	W	32 ± 0.3

SM-41

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.9 ± 0.1
	Width	B ₀	8.4 ± 0.1
	Depth	K ₀	7.4 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	24 ± 0.3

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SM-44, SM-68

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	7.5 ± 0.1
	Width	B ₀	8.4 ± 0.1
	Depth	K ₀	5.5 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

SM-46

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	20.9 ± 0.1
	Width	B ₀	11.4 ± 0.1
	Depth	K ₀	6.8 ± 0.1
	Pitch	P ₁	24 ± 0.1
Carrier Tape	Width	W	32 ± 0.3

SM-52

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	5.6 ± 0.1
	Width	B ₀	5.6 ± 0.1
	Depth	K ₀	3 ± 0.1
	Pitch	P ₁	8 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

SM-55

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.8 ± 0.1
	Width	B ₀	7.6 ± 0.1
	Depth	K ₀	3.5 ± 0.1
	Pitch	P ₁	12 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

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SM-106

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	10.7 ± 0.1
	Width	B ₀	20.8 ± 0.1
	Depth	K ₀	6 ± 0.1
	Pitch	P ₁	24 ± 0.1
Carrier Tape	Width	W	32 ± 0.3

SOD-323

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	1.46 ± 0.1
	Width	B ₀	2.9 ± 0.05
	Depth	K ₀	1.25 ± 0.05
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.05
	Cavity to Perforation (width)	F	3.5 ± 0.05
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 +0.3/-0.1

SOIC-8 (SO-8)

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.4 ± 0.1
	Width	B ₀	5.2 ± 0.1
	Depth	K ₀	2.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	5.5 ± 0.1
Cover Tape	Width	C	9.2 ± 0.1
Carrier Tape	Width	W	12 ± 0.3

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SOIC-14 (SO-14), SSOP-24

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.5 ± 0.1
	Width	B ₀	9 ± 0.1
	Depth	K ₀	2.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

SOIC-16 (SO-16), SSOP-28

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.5 ± 0.1
	Width	B ₀	10.3 ± 0.1
	Depth	K ₀	2.1 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

SOT-23

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.125 ± 0.125
	Width	B ₀	2.835 ± 0.165
	Depth	K ₀	1.23 ± 0.11
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	3.5 ± 0.1
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 ± 0.3

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SOT-25, SOT-26

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.2 ± 0.1
	Width	B ₀	3.2 ± 0.1
	Depth	K ₀	1.4 ± 0.1
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	3.5 ± 0.1
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 ± 0.3

SOT-89

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	4.6 ± 0.1
	Width	B ₀	4.78 ± 0.1
	Depth	K ₀	1.9 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	5.5 ± 0.5
Cover Tape	Width	C	9.3 ± 0.1
Carrier Tape	Width	W	12 ± 0.2

SOT-143

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.1 ± 0.1
	Width	B ₀	2.69 ± 0.1
	Depth	K ₀	1.3 ± 0.1
	Pitch	P ₁	4 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	3.5 ± 0.1
Cover Tape	Width	C	5.4 ± 0.1
Carrier Tape	Width	W	8 ± 0.3

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SOW-16 (SOIC-16 Wide Body)

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A_0	10.9 ± 0.1
	Width	B_0	10.7 ± 0.1
	Depth	K_0	3 ± 0.1
	Pitch	P_1	12 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P_2	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

SOW-24 (SOIC-24 Wide Body)

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A_0	10.7 ± 0.2
	Width	B_0	15.8 ± 0.2
	Depth	K_0	3 ± 0.1
	Pitch	P_1	12 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P_2	2 ± 0.1
	Cavity to Perforation (width)	F	11.5 ± 0.1
Cover Tape	Width	C	20
Carrier Tape	Width	W	24 ± 0.3

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SSOP-8

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	3.4 ± 0.1
	Width	B ₀	8.3 ± 0.1
	Depth	K ₀	2.54 ± 0.1
	Pitch	P ₁	8
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

SSOP-20

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	8.2 ± 0.1
	Width	B ₀	7.5 ± 0.1
	Depth	K ₀	2.5 ± 0.1
	Pitch	P ₁	12 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

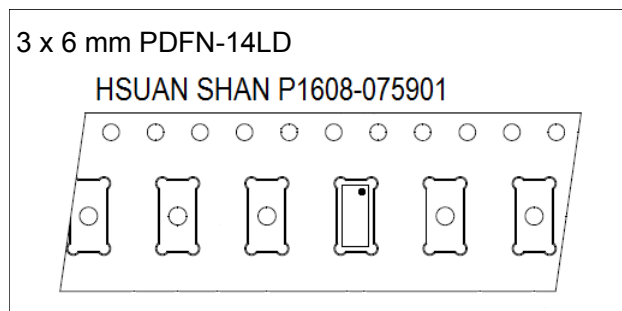
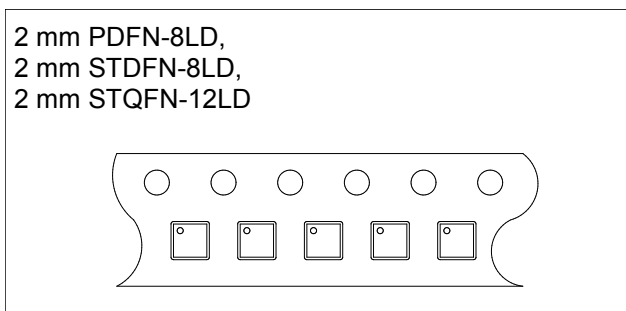
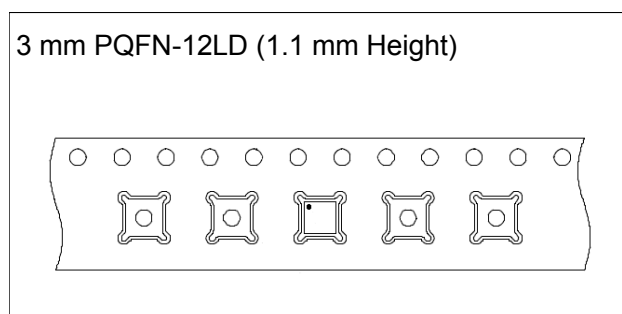
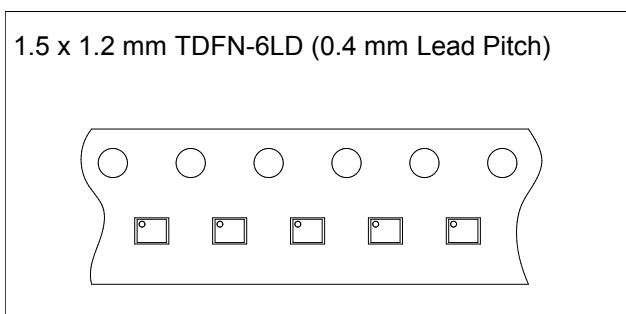
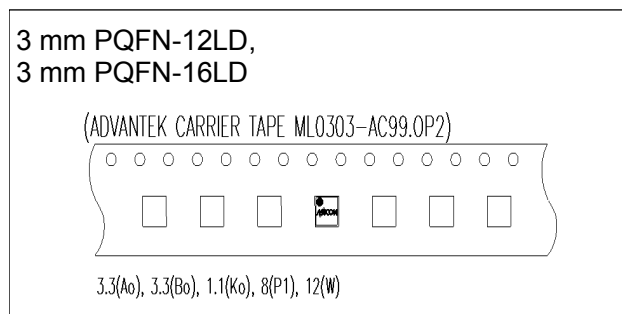
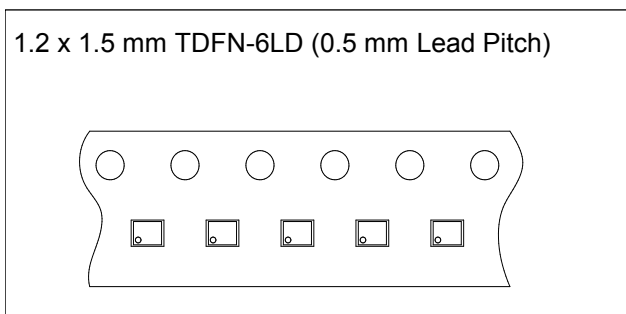
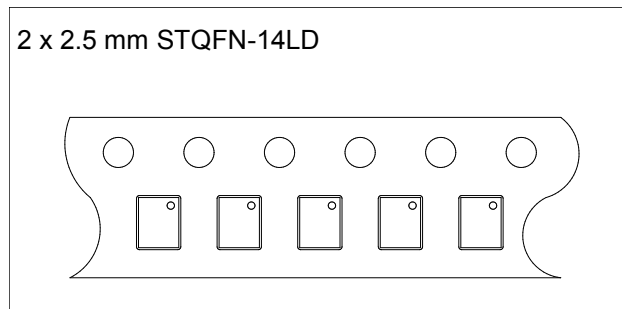
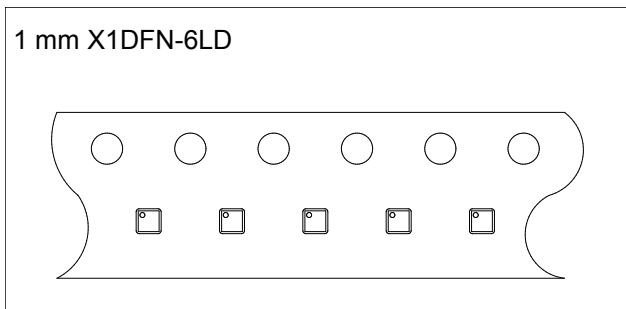
TSSOP-16, TSSOP-16EP

Tape Dimensions	Description	Symbol	Size (mm)
Cavity	Length	A ₀	6.95 ± 0.1
	Width	B ₀	5.6 ± 0.1
	Depth	K ₀	1.6 ± 0.1
	Pitch	P ₁	8 ± 0.1
Distance Between Centerlines	Cavity to Perforation (length)	P ₂	2 ± 0.1
	Cavity to Perforation (width)	F	7.5 ± 0.1
Cover Tape	Width	C	13.3 ± 0.1
Carrier Tape	Width	W	16 ± 0.3

Tape and Reel Packaging for Surface Mount Components

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4.0 Component Orientation for Tape and Reel

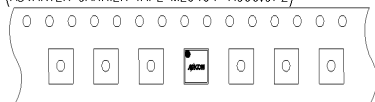


Tape and Reel Packaging for Surface Mount Components

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4 mm PQFN-16LD,
4 mm PQFN-20LD,
4 mm PQFN-24LD

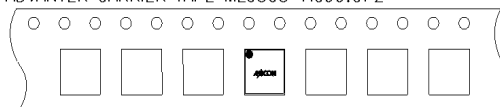
(ADVANTEK CARRIER TAPE ML0404-AC99.OP2)



4.35(Ao), 4.35(Bo), 1.1(Ko), 8(P1), 12(W)

5 mm PQFN-20LD,
5 mm PQFN-28LD,
5 mm PQFN-32LD

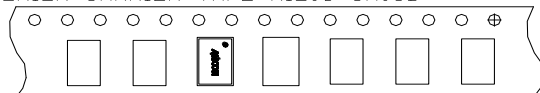
ADVANTEK CARRIER TAPE ML0505-AC99.OP2



5.25(Ao), 5.25(Bo), 1.1(Ko), 8(P1), 12(W)

4 x 6 mm PQFN-32LD

ORION CARRIER TAPE R1208-CH06B

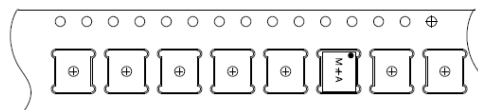


4.2(Ao), 6.2(Bo), 1.2(Ko), 8(P1), 12(W)

User direction of feed →

5 x 6 mm PQFN-32LD

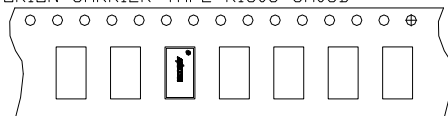
(ADVANTEK CARRIER TAPE CCA017-AC400.P1)



5.30(Ao), 6.30(Bo), 1.20(Ko), 8(P1), 16(W)

4 x 7 mm PQFN-36LD

ORION CARRIER TAPE R1608-CH06B

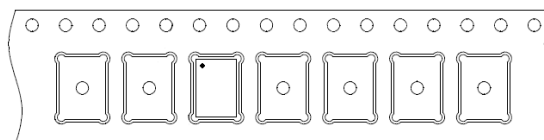


4.2(Ao), 7.2(Bo), 1.2(Ko), 8(P1), 16(W)

User direction of feed →

5 x 7 mm PQFN-40LD

ADVANTEK CARRIER TAPE ML0507-A

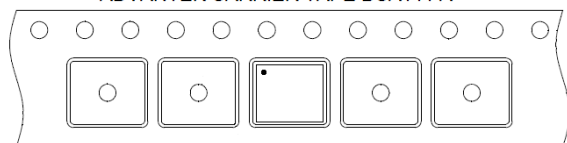


Tape and Reel Packaging for Surface Mount Components

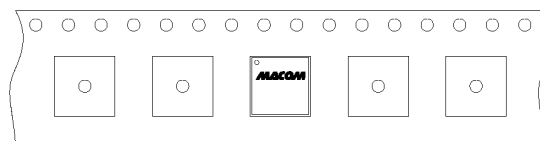
Rev. V20

6 x 5 mm PDFN-8LD

ADVANTEK CARRIER TAPE BCA144-A



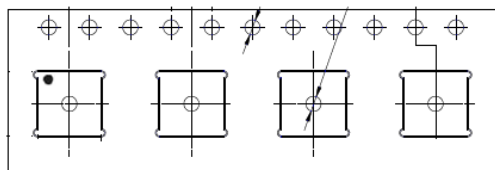
7 mm LGA-16LD



User Direction of Feed

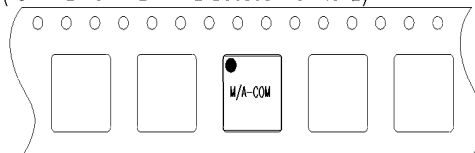
6 x 6 mm PQFN-20LD

Actech Carrier Tape (ACT-QFN0606-P)



8 mm BGA

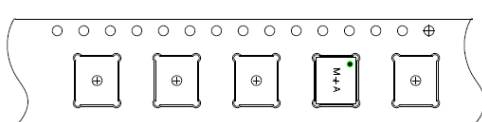
(ADVANTEK CARRIER TAPE BG0808-AC74.OP2)



8.3(Ao), 8.3(Bo), 2.7(Ko), 1.7(K1), 12(P1), 16(W)

6 x 7 mm PQFN-37LD

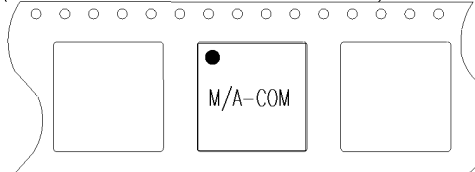
(ADVANTEK CARRIER TAPE CDA030-AC400.P1)



6.40(Ao), 7.40(Bo), 1.20(Ko), 12(P1), 16(W)

15 mm BGA

(ADVANTEK CARRIER TAPE BG1515-DC60.OP2)

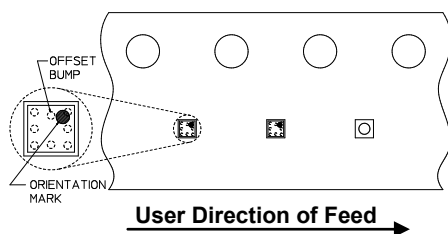


15.3(Ao), 15.3(Bo), 3.8(Ko), 2.8(K1), 20(P1), 24(W)

Tape and Reel Packaging for Surface Mount Components

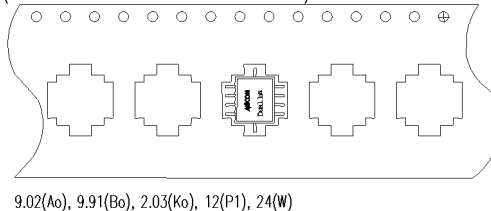
Rev. V20

BD-1, Bumped Die, 0.705 mm Sq.
(bumps facing down)

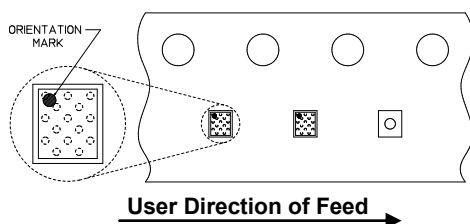


CR-5

(ORION CARRIER TAPE R2412-AM10B)

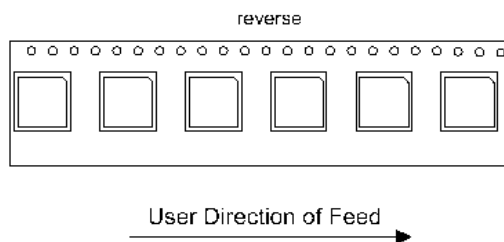


BD-2, Bumped Die, 0.925 x 1.095 mm
(bumps facing down)

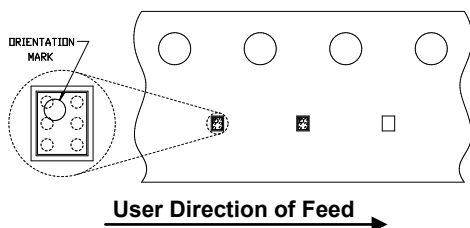


LCC1

TR3

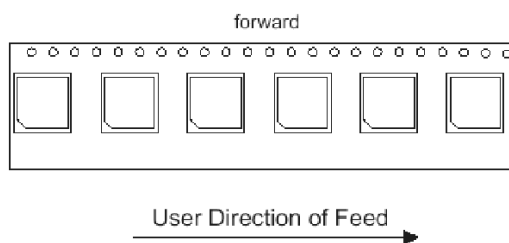


BD-3, Bumped Die, 0.485 x 0.605 mm
(bumps facing down)



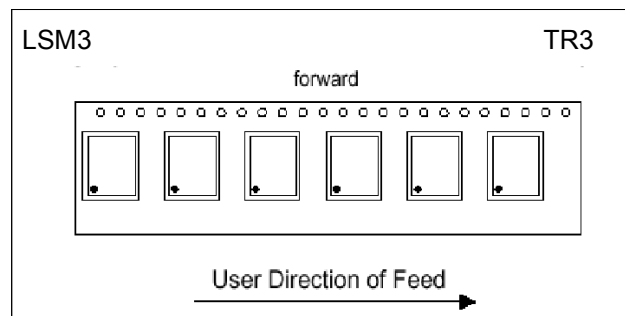
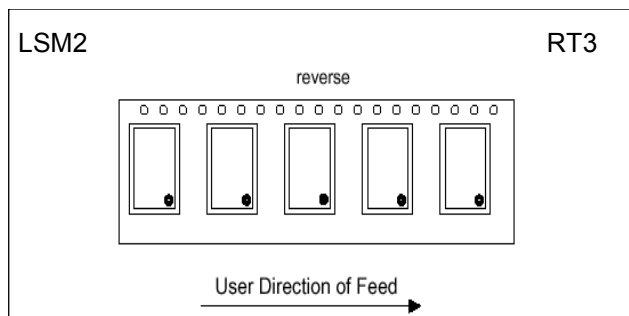
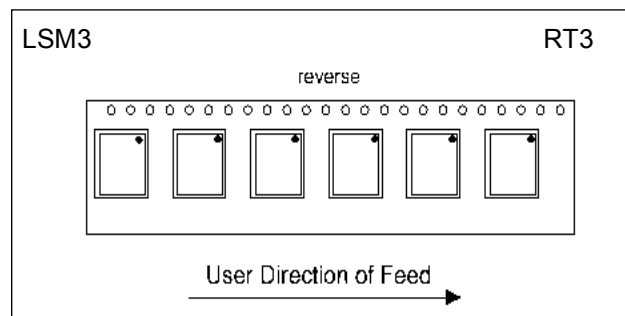
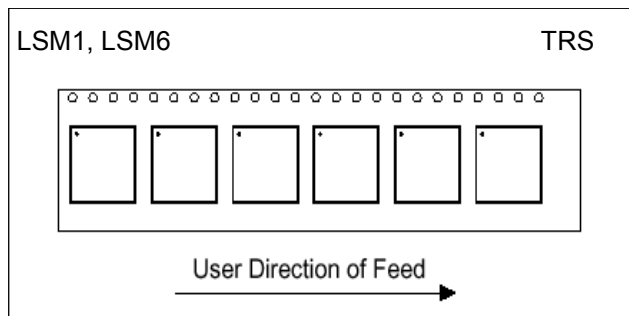
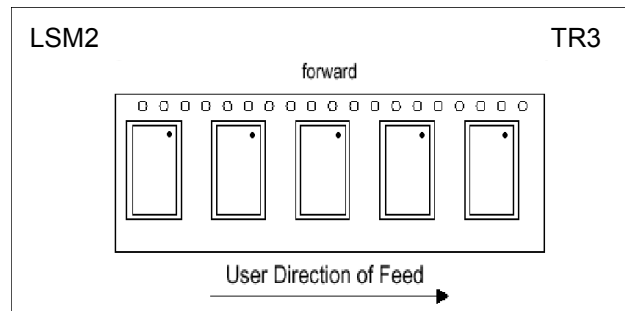
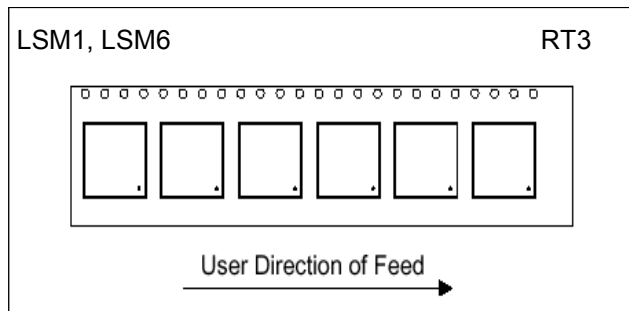
LCC1

TR3



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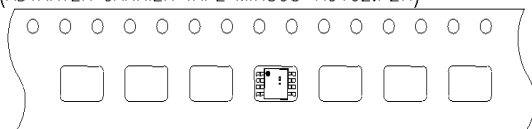


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MSOP-8, -10

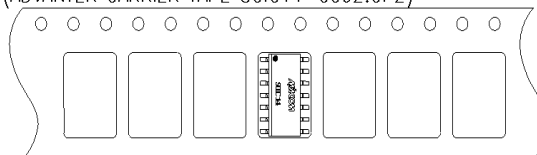
(ADVANTEK CARRIER TAPE MINSO8-AC102.P2R)



5.3(Ao), 3.4(Bo), 1.4(Ko), 8(P1), 12(W)

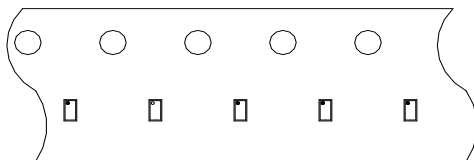
QSOP-24, SOIC-14

(ADVANTEK CARRIER TAPE SOIC14-CC92.OP2)



6.5(Ao), 9(Bo), 2.1(Ko), 8(P1), 16(W)

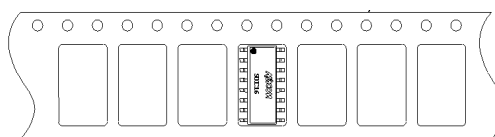
ODS-1294, 1295 & 1306



USER DIRECTION OF FEED
→

QSOP-28, SOIC-16

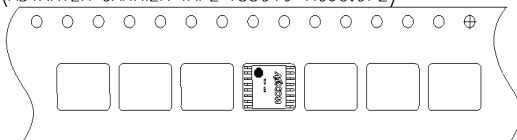
(ADVANTEK CARRIER TAPE SOIC-AC90.OP2)



6.5(Ao), 10.3(Bo), 2.1(Ko), 8(P1), 16(W)

QSOP-16, QSOP-16EP, TSSOP-16

(ADVANTEK CARRIER TAPE TSSO16-AC95.OP2)

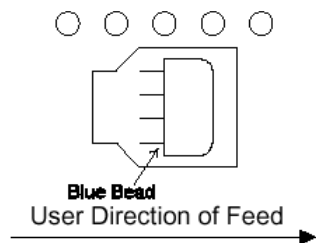


6.8(Ao), 5.4(Bo), 1.6(Ko), 1.3(K1), 8(P1), 16(W)

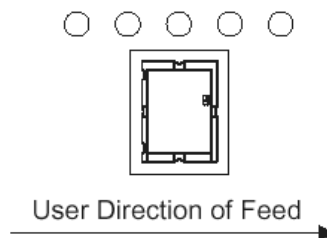
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R-1, R-4, R-15

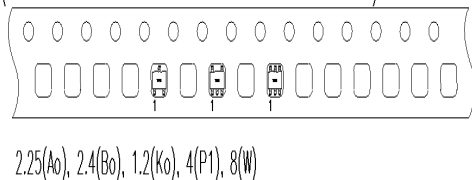


SM-2, SM-4, SM-44, SM-68, SM-74, SM-108

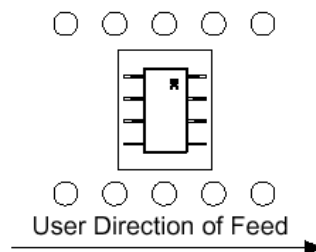


SC70-3LD, SC70-6LD

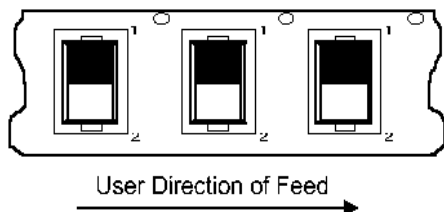
(ADVANTEK CARRIER TAPE SC70NS-AC500.P6)



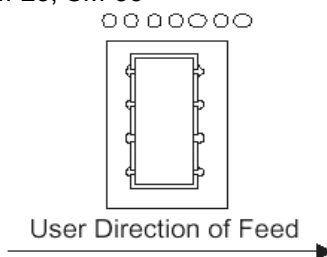
SM-3, SM-26



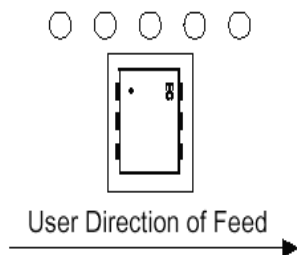
SC-79, SOD-323



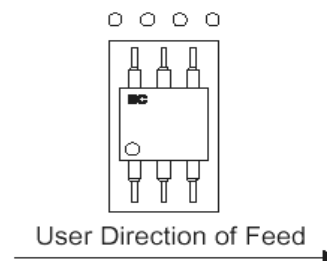
SM-7-1, SM-28, SM-55



SM-1, SM-23, SM-41, SM-69, SM-87, SM-89,
SM-134

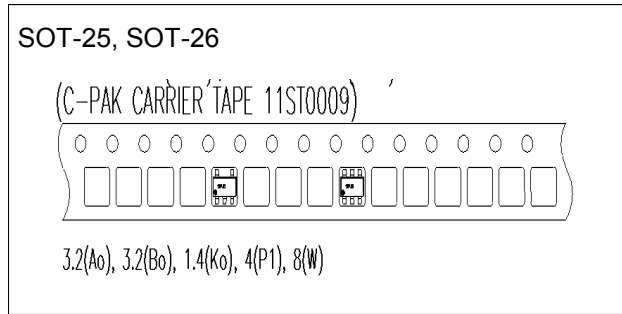
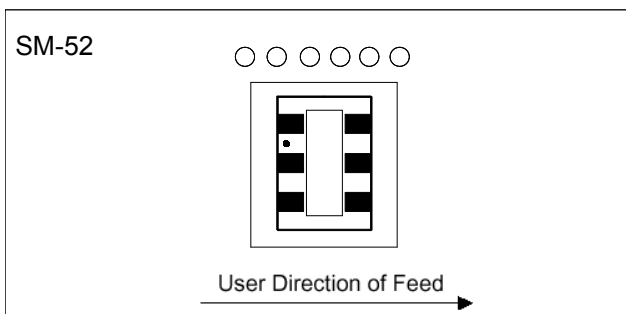
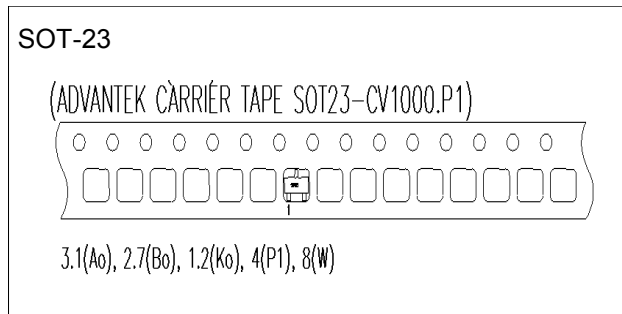
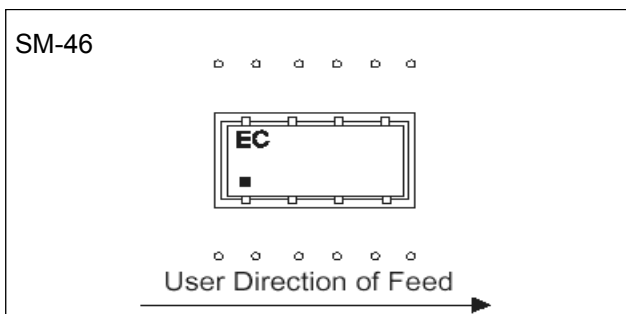
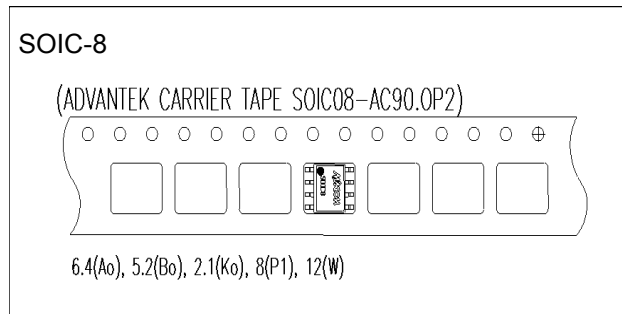
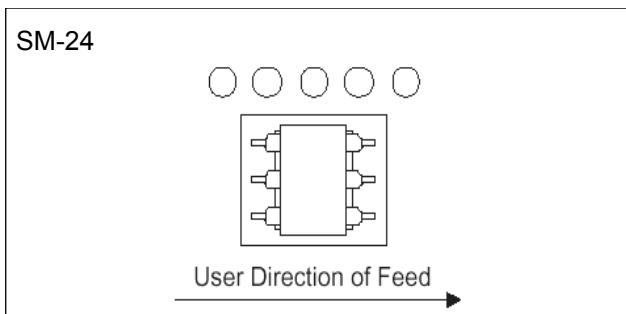
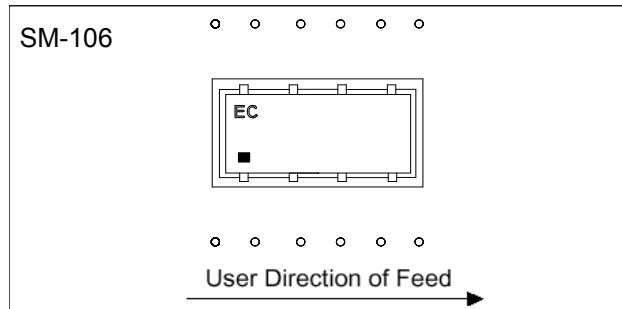
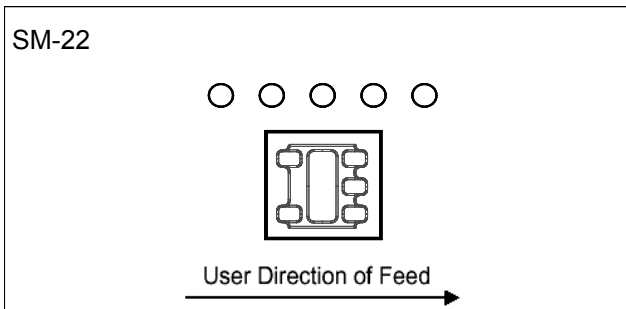


SM-20



Tape and Reel Packaging for Surface Mount Components

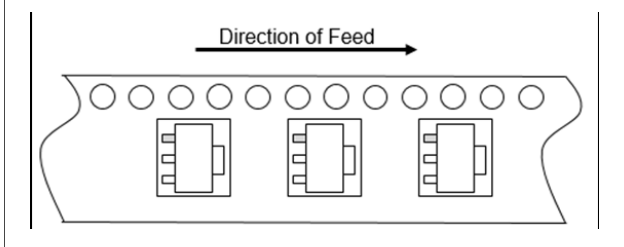
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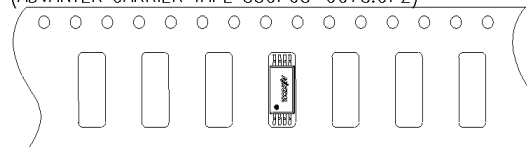
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SOT-89



SSOP-8

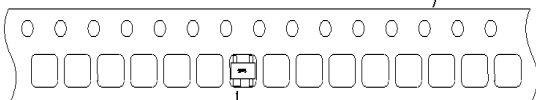
(ADVANTEK CARRIER TAPE SSOP08-CC78.OP2)



3.4(Ao), 8.3(Bo), 2.54(Ko), 1.91(K1), 8(P1), 16(W)

SOT-143

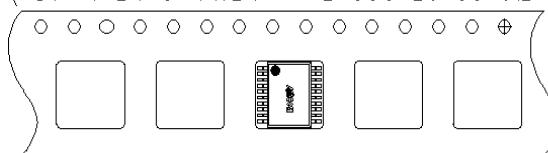
(ADVANTEK CARRIER TAPE SOT-143-AV1000.P1)



3.2(Ao), 2.7(Bo), 1.35(Ko), 4(P1), 8(W)

SSOP-20

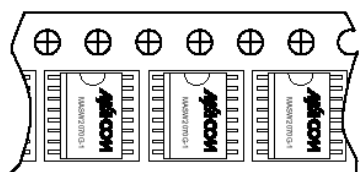
(ADVANTEK CARRIER TAPE SSOP20-CC79.2P2)



8.2(Ao), 7.5(Bo), 2.5(Ko), 2.1(K1), 12(P1), 16(W)

SOW-16 (SOIC-16 Wide Body)

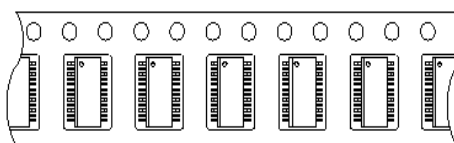
forward



User Direction of Feed

SSOP-24

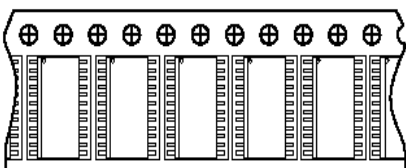
forward



User Direction of Feed

SOW-24 (SOIC-24 Wide Body)

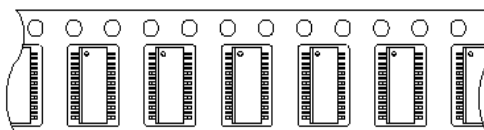
forward



User Direction of Feed

SSOP-28

forward



User Direction of Feed

Tape and Reel Packaging for Surface Mount Components

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5.0 Reel Information^{3,4}

Package Type	Max. Devices per Reel	Reel Diameter (inches)
1 mm X1DFN-6LD, 2 mm STDFN-8LD, 2 mm STQFN-12LD, 2 x 2.5 mm STQFN-14LD	3000	7
1.2 x 1.5 mm TDFN-6LD (0.5 mm pitch), 1.5 x 1.2 mm TDFN-6LD (0.4 mm pitch)	3000	7
2 mm PDFN-8LD	3000	13
3 mm PQFN-12LD, 3 mm PQFN-12LD (1.1 mm height), 3 mm PQFN-16LD, 3 x 6 mm PDFN-14LD 4 mm PQFN-16LD, 4 mm PQFN-20LD, 4 mm PQFN-24LD	1000 3000	7 13
4 x 6 mm PQFN-32LD, 4 x 7 mm PQFN-36LD	1000	7
5 mm PQFN-20LD, 5 mm PQFN-28LD, 5 mm PQFN-32LD	1000	7
5 x 6 mm PQFN-36LD 5 x 7 mm PQFN-40LD	1000 3000	7 13
6 x 5 mm PDFN-8LD 6 x 7 mm PQFN-37LD	1000 3000	7 13
6 x 6 mm PQFN-20LD	3000	13
7 mm LGA-16LD	500	7
8 mm BGA, 15 mm BGA	1000	13
BD-1, BD-2, BD-3	3000	7
CR-5	2500	13
LCC1, LSM1, LSM2, LSM3	500	13
MSOP8, MSOP-8EP, MSOP-10	1000 3000	7 13
ODS-120	2000	7
ODS-186	750	7
ODS-1056	2500	7
ODS-1072	5000	13
ODS-1079	750	7
ODS-1091	500	7
ODS-1269, 1294, 1295, 1305, 1306, 1402, 1411, 1500	3000	7

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5.0 Reel Information (continued)^{3,4}

Package Type	Max. Devices per Reel	Reel Diameter (inches)
QSOP-16, QSOP-16EP, QSOP-24, QSOP-28	1000	7
R-1, R-4, R-5, R-15	500	13
SC70-3LD, SC70-6LD, SC-79, SOT-23, SOT-25, SOT-26, SOT-89, SOT-143, SOD-323	3000	7
SM-1, SM-55, SM-69	900	13
SM-2, SM-4, SM-7-1, SM-20, SM-23, SM-24, SM-41, SM-44	500	13
SM-3, SM-26, SM-28, SM-46, LSM6	300	13
SM-22	2000	13
SM-52	2500	13
SM-68, SM-74, SM-106, SM-108	500	13
SM-87, SM-89, SM-134	900	13
SOIC-8 (SO-8)	1000 3000 2000 (E-Series)	7 13 13
SOIC 14 (SO-14), SOIC 16 (SO-16)	1000 3000	7 13
SOW-16 (SOIC-16 Wide Body), SOW-24 (SOIC-24 Wide Body)	1000	13
SSOP-8	900 3000	7 13
SSOP-20, SSOP-24, SSOP-28	1000	13
TSSOP-16, TSSOP-16EP	1000 2500	7 13

3. See individual data sheets for part number ordering information.

4. Most device in tape and reel must be ordered in multiples of 100 pieces, with a minimum order quantity of either 200 or 500 pieces per part number. Consult factory for individual package types.

Tape and Reel Packaging for Surface Mount Components

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