



Integrated Device Technology, Inc.
6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **TB1405-01** DATE: **July 7, 2014**
 Product Affected: **TQFP-44, TQFP-64**
 shipped in Tape & Reel
 (Refer to Attachment II for affected part#)
 Date Effective: **October 7, 2014**

MEANS OF DISTINGUISHING CHANGED DEVICES:
 Product Mark
 Back Mark
 Date Code
 Other Shipment starting from October 7, 2014.

Contact: IDT PCN DESK
 E-mail: pcndesk@idt.com

Attachment: Yes No
 Samples: N/A

DESCRIPTION AND PURPOSE OF CHANGE:

- | | |
|---|--|
| <input type="checkbox"/> Die Technology | This notification is to advise our customers that IDT has planned to convert to a new revision of the carrier tape and to standardize the quantity per reel. |
| <input type="checkbox"/> Wafer Fabrication Process | |
| <input type="checkbox"/> Assembly Process | |
| <input type="checkbox"/> Equipment | The new carrier tape has changes in pocket design and dimensions. |
| <input type="checkbox"/> Material | |
| <input type="checkbox"/> Testing | Attachment I - Additional information on the changes. |
| <input type="checkbox"/> Manufacturing Site | Attachment II - Affected part list |
| <input type="checkbox"/> Data Sheet | Attachment III - Carrier Tape Drawings |
| <input checked="" type="checkbox"/> Other - Packaging | |

RELIABILITY/QUALIFICATION SUMMARY:

New carrier tape passed IDT internal qualification requirements and complies with EIA-481-D standard.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.
 IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: _____ **Approval for shipments prior to effective date.**
 Name/Date: _____ E-Mail Address: _____
 Title: _____ Phone# /Fax# : _____

CUSTOMER COMMENTS: _____

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____ DATE: _____



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PCN Type: Packaging

Data Sheet Change: None

Detail of Change: This notification is to advise our customers that IDT has planned to convert to a new revision of the carrier tape and to standardize the quantity per reel.

The new carrier tape has changes in pocket design and dimensions and complies with the requirements of EIA-481-D standard.

The new carrier tape passed the IDT internal qualification requirements. Refer to Table 1 for the qualification results.

Refer to Table 2, Figure 1 and 2 for the comparison of the existing and new carrier tape in terms of carrier tape pocket dimensions and pocket designs as well as quantity per reel respectively.

In addition, the packing will be changed where every reel will be wrapped with a layer of bubble sheet before placed into a pizza box for increased protection.

Qualification Test Plan and Result:

Table 1: IDT Internal Qualification Results

Description	Reject/Sample Size	Result
Peel Strength Test	0/5 strips	Pass
Visual/Mechanical	0/5 pockets	Pass
Surface Resistivity Test	0/5 pockets	Pass
Drop Test, 6 ft	0/1 reel	Pass
Dimensional	0/5 pockets	Pass



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Table 2: Comparison of Existing Carrier Tape and New Carrier Tape and Quantity Per Reel

Description of Changes	From	To
IDT Carrier Tape Part#	P8-300-E64	P8-460-000
IDT Carrier Tape Drawing#	MSC-4900	MSC-7396
Supplier Carrier Tape Part#	TQFP10x10x1.0-22B3-360C-SD	TQFP10x10x1.0NGP-22B3-360C-SD
Supplier	PCT	PCT
Pocket Width, Ao (mm)	13.0 ± 0.1	12.5 ± 0.1
Pocket Length, Bo (mm)	13.0 ± 0.1	12.5 ± 0.1
Pocket Depth, Ki (mm)	1.3 ± 0.1	1.1 ± 0.05
Pocket Pitch, P1 (mm)	16.0 ± 0.1	16.0 ± 0.1
Total Pocket Depth, Ko (mm)	1.6 ± 0.1	1.4 ± 0.1
Carrier Tape Width, W (mm)	24.0 ± 0.3	24.0 +0.2/-0.1
Carrier Tape Thickness, T (mm)	0.30 ± 0.05	0.30 ± 0.05
Quantity per Reel	¹ 500 & ² 2000	500

Notes:

- 1. TQFP-44 & TQFP-64 from ICS market segment*
- 2. TQFP-64 from IDT market segment*



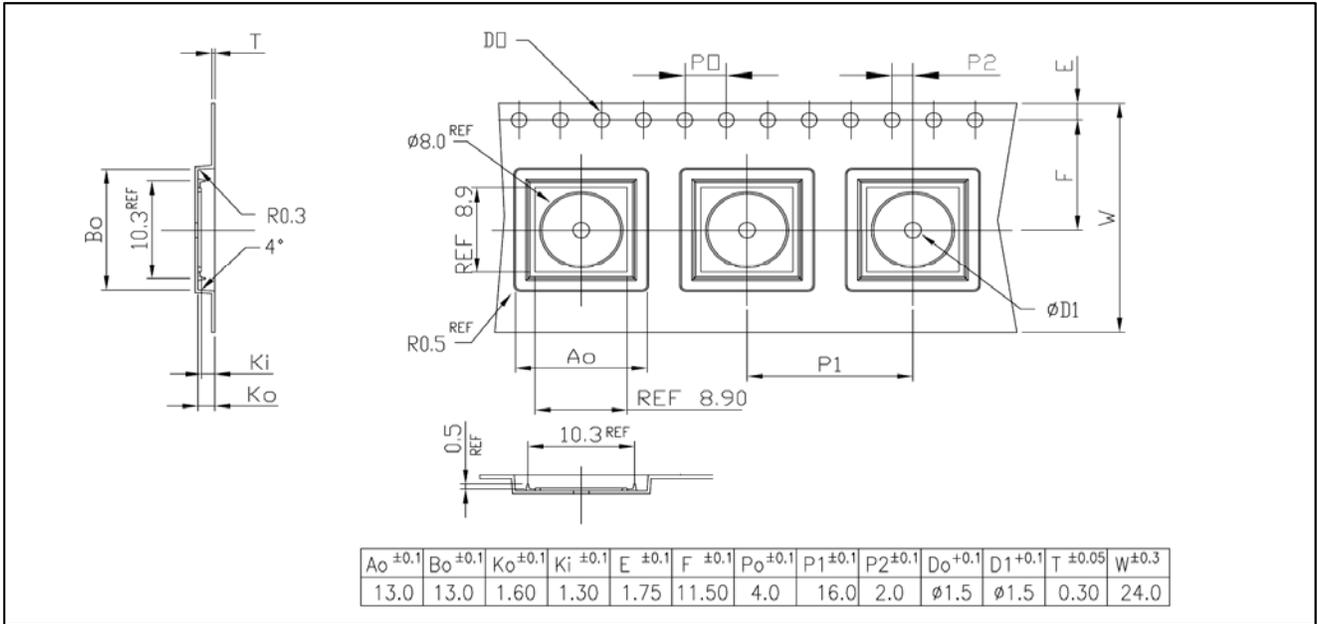
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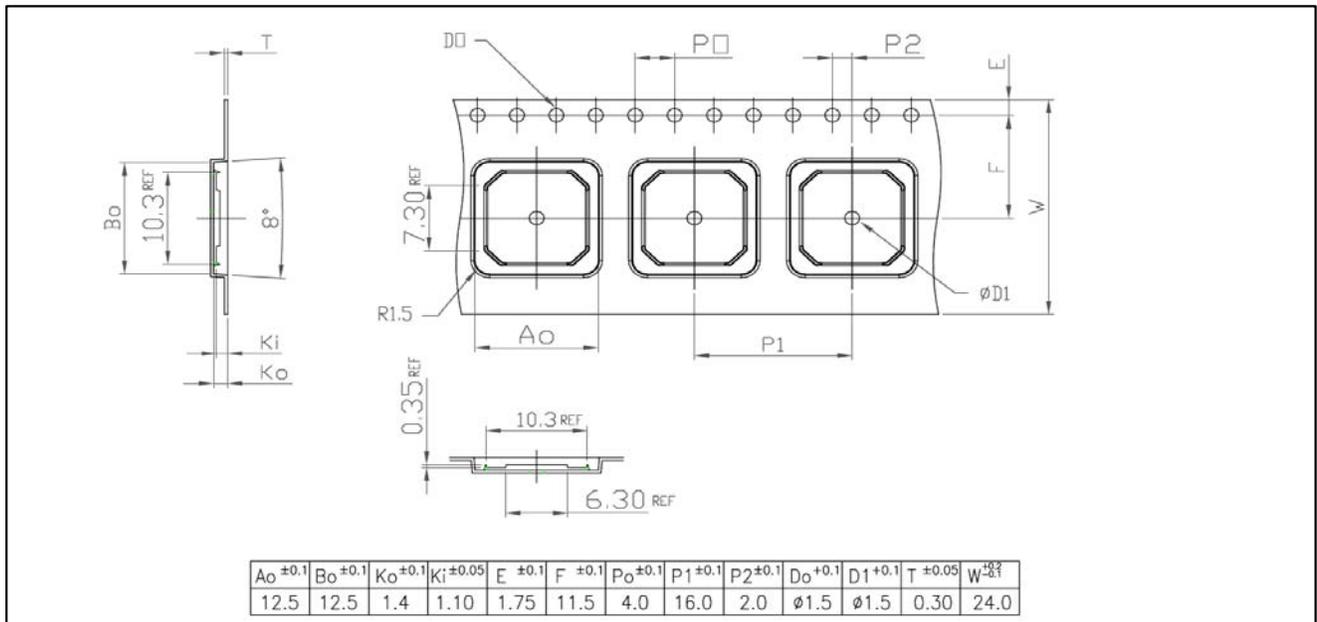
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Figure1: Illustration of Carrier Tape Pocket Dimensions

From: Carrier Tape (P8-300-E64) - Pocket Dimensions



To: Carrier Tape (P8-460-000) - Pocket Dimensions



*Note: All dimensions are in mm. Refer to the attached carrier tape drawings for more details.



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Figure2: Illustration of Carrier Tape Pocket Design

From: Carrier Tape (P8-300-E64)



To: Carrier Tape (P8-460-000)

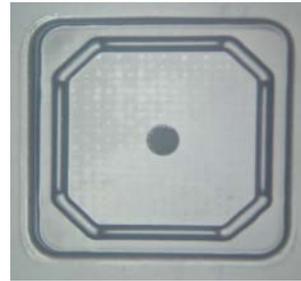


Figure3: Illustration for Tape & Reel Packing Changes

From: Packing for Tape & Reel
(Without bubble sheet)



To: Packing for Tape & Reel (Wrap
with bubble sheet)



bubble sheet

pizza box



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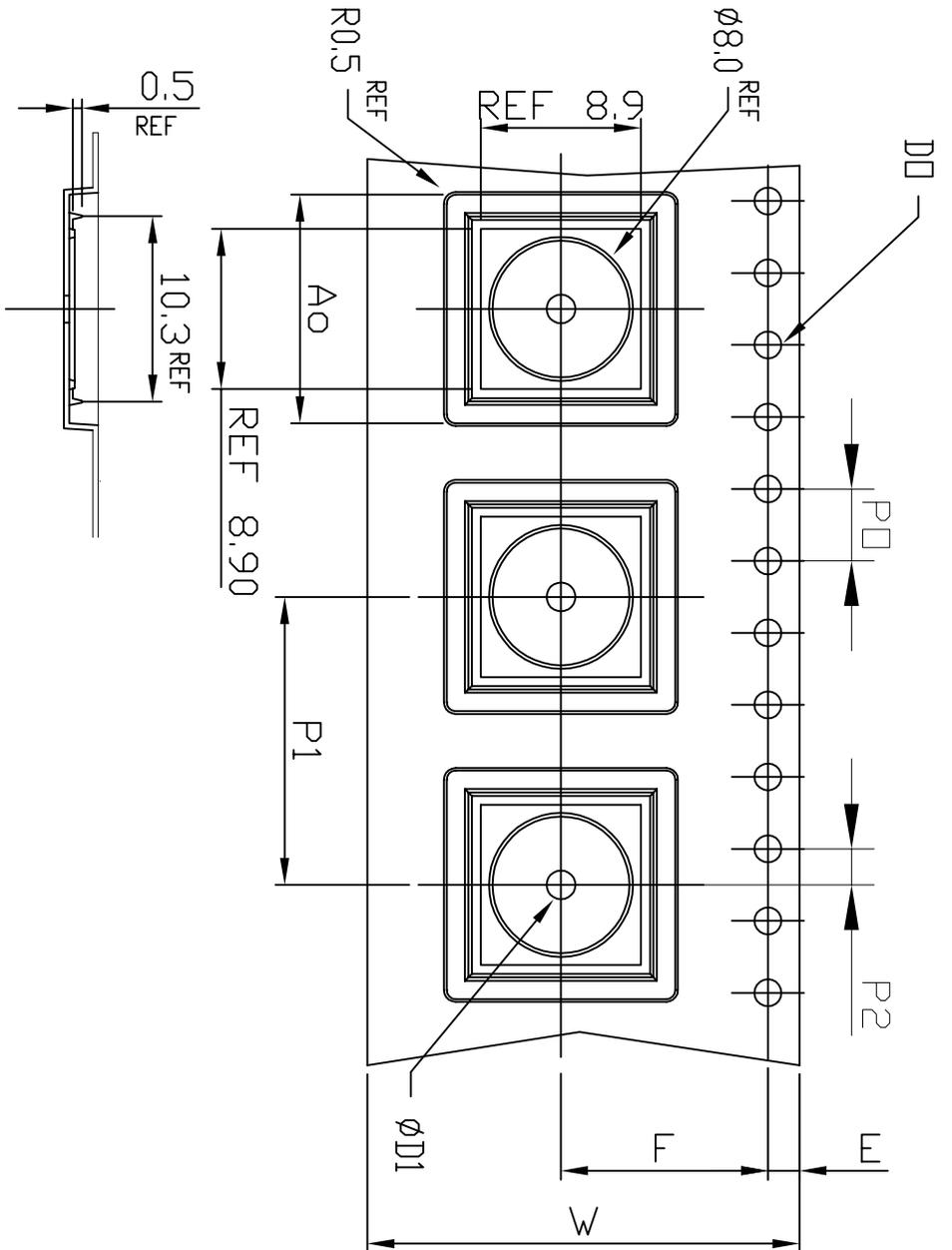
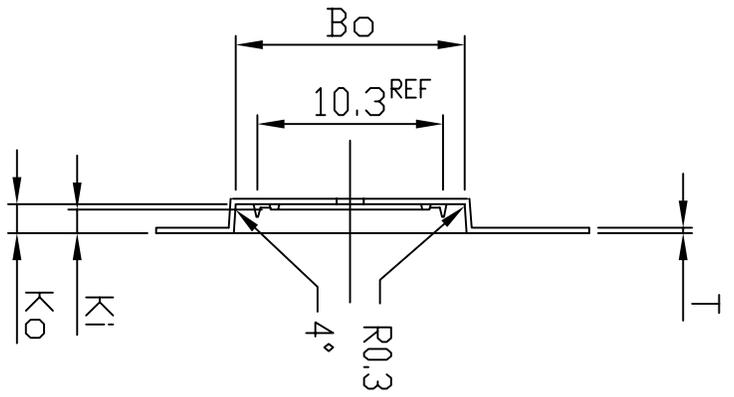
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ATTACHMENT II - PCN #: TB1405-01

Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
1893BYI-10LFT	813078BYILFT	841N251DY-01LFT	872S06AYLFT
1893CY-10LFT	82V3202EDG8	843002AY-32LFT	874328BYI-01LFT
1893CYI-10LFT	82V3255EDG8	851021AYLFT	8V41N351Y-01LF8
1893Y-10LFT	82V3352EDG8	8524AYLFT	V103YLFT
1893YI-10LFT	82V3355EDG8	8534AY-01LFT	V104YLFT
2008BY-10LFT	82V3358EDG8	853S024AYLFT	
813076CYILFT	841N251CY-01LFT	854S54AYI-08LFT	

Attachment III - Existing Carrier Tape Drawing



Ao ±0.1	Bo ±0.1	Ko ±0.1	Ki ±0.1	E ±0.1	F ±0.1	Po ±0.1	P1 ±0.1	P2 ±0.1	Do +0.1	D1 +0.1	T ±0.05	W ±0.3
13.0	13.0	1.60	1.30	1.75	11.50	4.0	16.0	2.0	Ø1.5	Ø1.5	0.30	24.0

NOTES : (UNLESS OTHERWISE SPECIFIED)

1. SUPPLIER : PCT
2. SUPPLIER PART NUMBER : TOPP10x10x1.0-22B3-360C-SD
3. 10 SPROCKET HOLE PITCHES CUMULATIVE TOLERANCE ±0.2mm
4. REFER TO MSA-3018 FOR THE ALLOWABLE CAMBER REQUIREMENT.
5. MATERIAL : BLACK CONDUCTIVE POLYSTYRENE.
6. Ao AND Bo MEASURED ON A PLANE 0.3 MM ABOVE THE BOTTOM OF THE POCKET.
7. Ko MEASURED FROM A PLANE ON THE INSIDE BOTTOM OF THE POCKET TO THE TOP SURFACE OF THE CARRIER.
8. POCKET POSITION RELATIVE TO SPROCKET HOLE CENTER MUST BE SAME POSITION.
9. POCKET CENTER AND POCKET HOLE CENTER MUST BE SAME POSITION.
10. REFER TO MAA-3092 & MSA-3018 FOR THE IDT STANDARD REQUIREMENT FOR CARRIER TAPE.
11. ALL THE DIMENSIONS ARE IN MILLIMETERS (MM).
12. LENGTH PER ROLL = 360 METERS.

TOLERANCES UNLESS OTHERWISE SPECIFIED
 DECIMAL .XX ± .13
 .XXX ± .13
 ANGLE ±.5°

WWW.IDT.COM

IDT

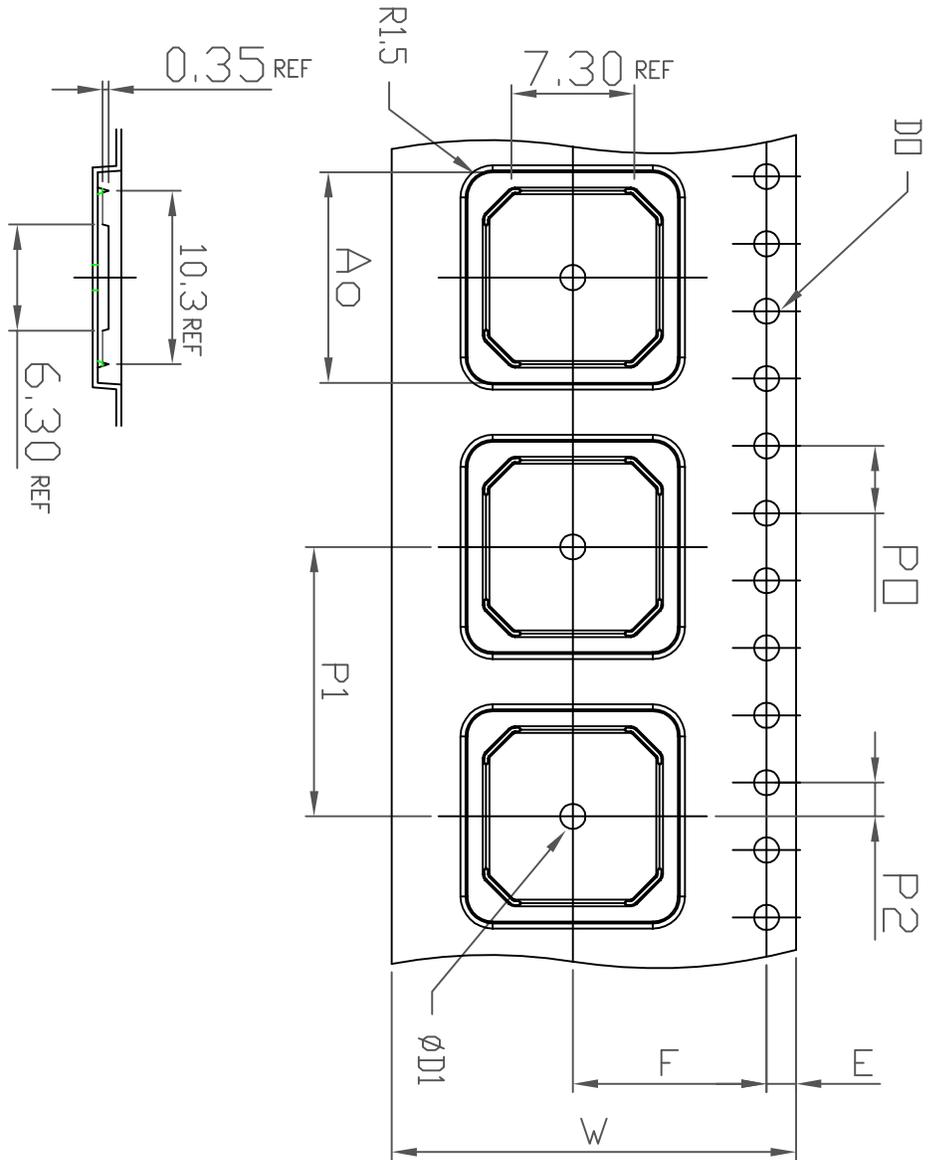
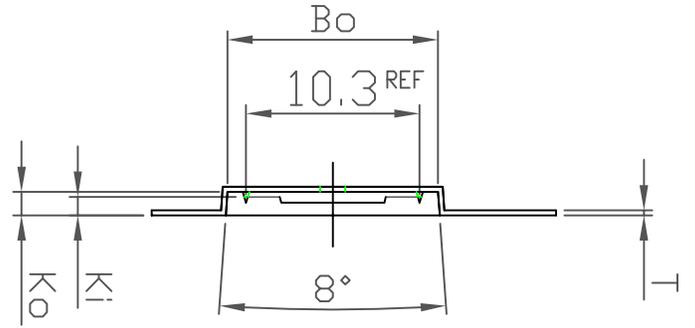
6024 Silver Creek Valley Road
 San Jose, CA 95138
 PHONE: (408) 284-8200
 FAX: (408) 284-5972

DATE	APPROVALS	DRAWN

TITLE:	DE/DEG 44/64 & ED/EDG 64
CARRIER TAPE (PCT)	
STOCK NO.	P8-300-E64
DRAWING NO.	MSC-4900
REV	N/A
SCALE	1 OF 2

DO NOT SCALE DRAWING

Attachment III - New Carrier Tape Drawing



Ao	±0.1	Bo	±0.1	Ko	±0.1	Ki	±0.05	E	±0.1	F	±0.1	PO	±0.1	P1	±0.1	P2	±0.1	Do	+0.1	D1	+0.1	T	±0.05	W	+0.2
12.5		12.5		1.4		1.10		1.75		11.5		4.0		16.0		2.0		Ø1.5		Ø1.5		0.30		24.0	

- NOTES : (UNLESS OTHERWISE SPECIFIED)
- SUPPLIER : PCT
 - SUPPLIER PART NUMBER : TOPP10x10x1.0NCP-22B3-360C-SD
 - 10 SPROCKET HOLE PITCHES CUMULATIVE TOLERANCE ±0.2mm
 - REFER TO MSA-3018 FOR THE ALLOWABLE CAMBER REQUIREMENT.
 - MATERIAL : BLACK CONDUCTIVE POLYSTYRENE.
 - Ao AND Bo MEASURED ON A PLANE 0.3 MM ABOVE THE BOTTOM OF THE POCKET.
 - Ko MEASURED FROM A PLANE ON THE INSIDE BOTTOM OF THE POCKET TO THE TOP SURFACE OF THE CARRIER.
 - POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE.
 - POCKET CENTER AND POCKET HOLE CENTER MUST BE SAME POSITION.
 - REFER TO MAA-3092 & MSA-3018 FOR THE IDT STANDARD REQUIREMENT FOR CARRIER TAPE.
 - ALL THE DIMENSIONS ARE IN MILLIMETERS (MM).
 - LENGTH PER ROLL = 360 METERS.

TOLERANCES UNLESS OTHERWISE SPECIFIED		ANGLE ±.5°	
DECIMAL	.XX ± .25	ANGLE	±.5°
.XXX ± .13			
APPROVALS	DATE	WWW.IDT.COM	
DRAWN		6024 Silver Creek Valley Road San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-5572	
TITLE: DE/DEG 44/64 & ED/EDG 64 CARRIER TAPE (PCT)		STOCK NO. P8-460-000	DRAWING NO. MSC-7396
DO NOT SCALE DRAWING		REV 00	SCALE N/A
		SHEET 1 OF 1	SIZE