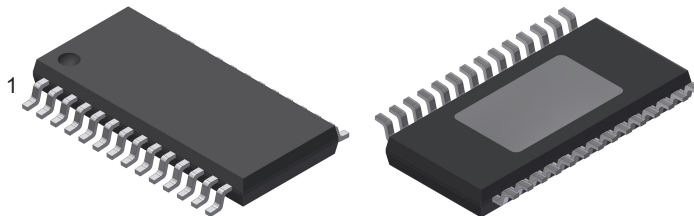
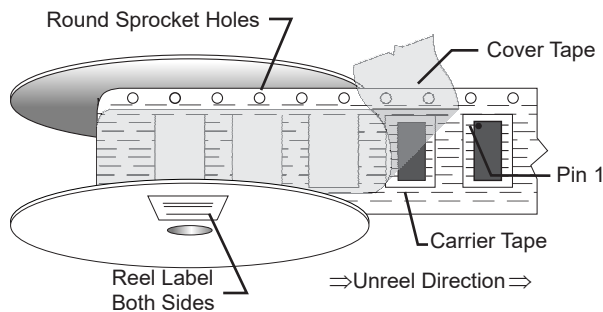


## LP-28 Package, TR Suffix

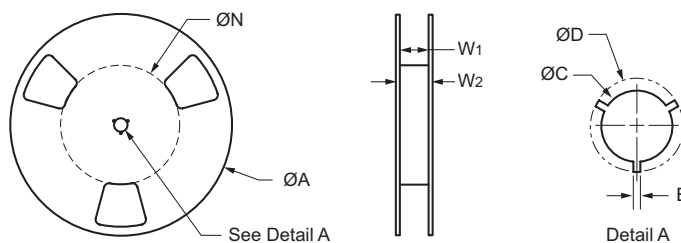


Terminals: 28, gull-wing  
Exposed thermal pad  
JEDEC MO-153 AET



- Embossed tape and reel
- 4000 devices per 13 in. reel
- 15 min. trailer pockets
- 50 min. leader pockets
- Exposed pad face down in tape (live bug)
- Pin 1 on trailing device edge, sprocket hole side

Leader pockets are the first off the reel when the tape is unreel for dispensing devices. Trailer pockets are the last pockets off the reel when unreel for dispensing devices.

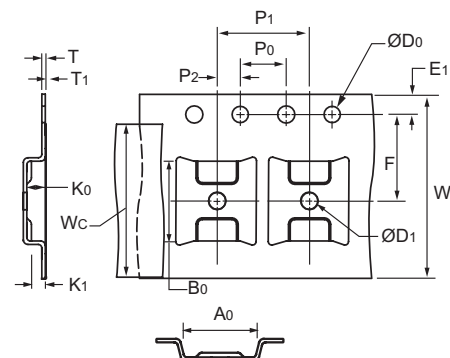


Access hole and hub configuration may vary at supplier discretion within limits shown

### Dimensions in mm

Type	A	B	C	D	N
Plastic 13 in.	330 (Nom)	1.5 (Min)	13 <sup>+0.5</sup> <sub>-0.2</sub>	20.2 (Min)	102 (Nom)
<b>W<sub>1</sub> (inside, at Hub)</b>			16.4 (Nom)		
<b>W<sub>2</sub> (outside, at Hub)</b>			22.4 (Max)		

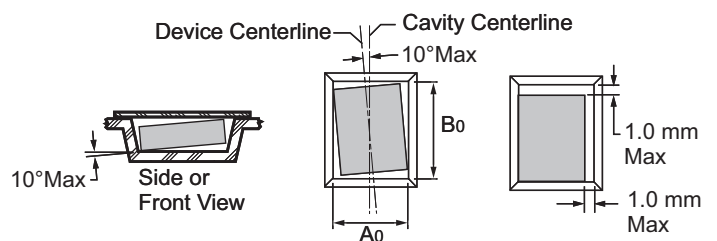
Reference EIA 481



### Dimensions in mm, may vary with supplier

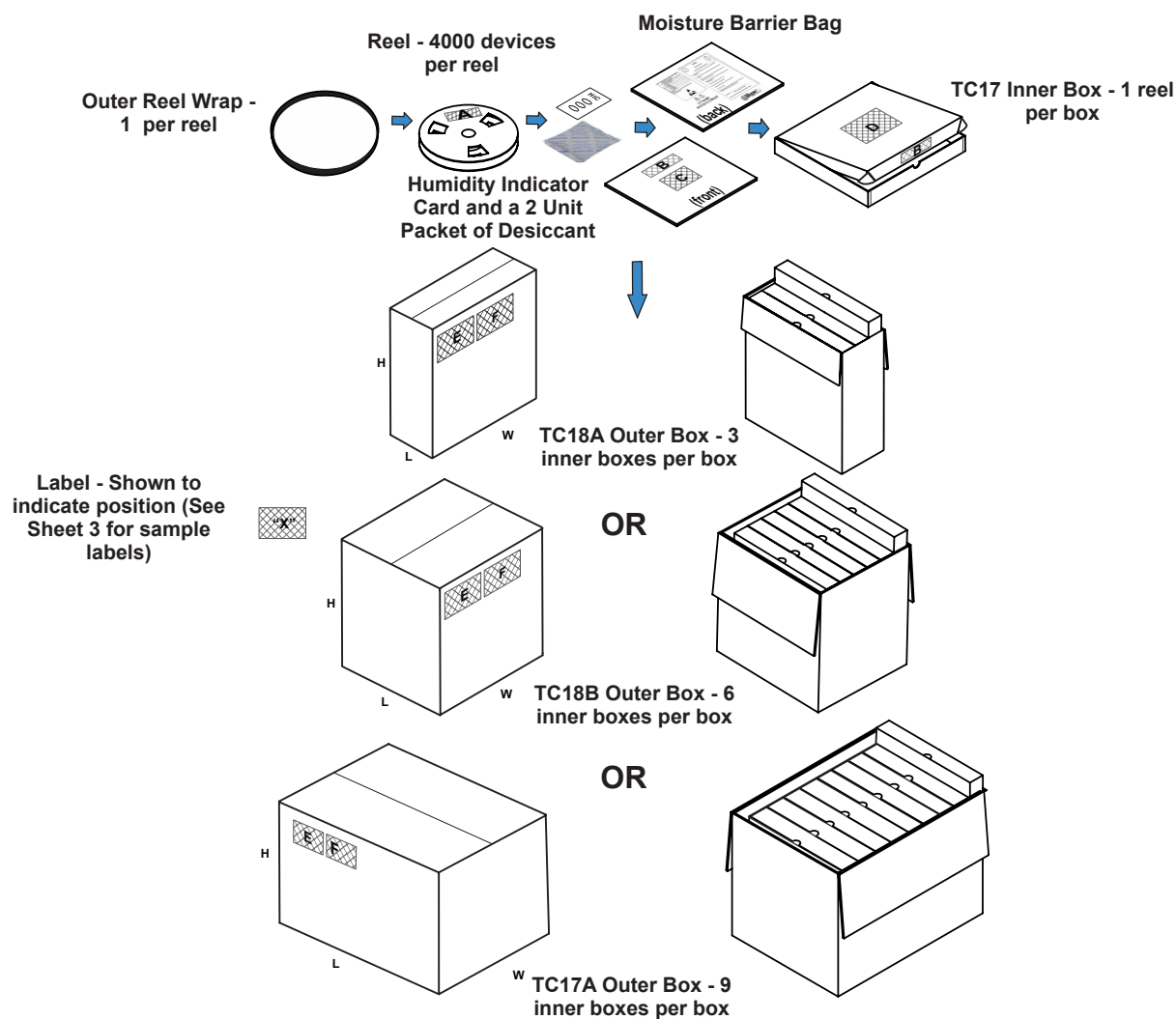
Carrier Tape			Cover Tape
W: 16.00	D <sub>0</sub> : 1.50	A <sub>0</sub> : 6.80	W <sub>C</sub> : 13.3 T <sub>1</sub> : 0.062
E <sub>1</sub> : 1.75	P <sub>0</sub> : 4.00	B <sub>0</sub> : 10.20	
F: 7.5	P <sub>1</sub> : 8.00	K <sub>0</sub> : 1.60	
T: 0.30	P <sub>2</sub> : 2.00	K <sub>1</sub> : 1.20	
		D <sub>1</sub> : 1.60	

1. Pocket centerlines to cavity center, not to pocket detection hole.
2. A<sub>0</sub> and B<sub>0</sub> measured 0.3 mm above bottom of pocket.



Reference EIA 481

## LP-28 Package, TR Suffix



Carton Dimensions (mm)

Type	Length	Width	Height	Inner Carton Standard Quantity	Outer Carton Standard Quantity
TC17	351	364	56	4000	
TC18A	188	380	365		12000
TC18B	380	368	365		24000
TC17A	536	403	400		36000

\* Carton Details pertain only to Full Standard Increments. Partial orders will only be provided for samples or due to exceptional circumstances. Partial orders may not be packed according to Carton Details but may require protective filler, empty inner boxes or other packing modifications.



## Label Details \*

### LP-28 Package, TR Suffix

#### Reel Production Label [A]

1.125in x 4in

	Part No:	XXXXXXXXXXXXXXXXXXXX			Date:	20150106		
	Catalog:	XXXXXXXXXXXXXXXXXXXX-X			MS-Level:	2		
	Qty:	XXXX			Moisture Sensitive Device			
	Lot 1:	1234567ABCD	Qty 1:	XXXX	Peak Reflow: 260C			
	Lot 2:	N/A	Qty 2:	0				

Reel

#### Moisture Barrier Bag / Box Flap Label [B]

1.125in x 4in

	Part No:	XXXXXXXXXXXXXXXXXXXX			Date:	20150106		
	Catalog:	XXXXXXXXXXXXXXXXXXXX-X			MS-Level:	2		
	Qty:	XXXX			Moisture Sensitive Device			
	Lot 1:	1234567ABCD	Qty 1:	XXXX	Peak Reflow: 260C			
	Lot 2:	N/A	Qty 2:	0				

#### 1D Production Label [C]

2.5in x 3.75in

Allegro MicroSystems, LLC			
Cust PN:	XXXXXXXXXX		
Mfr PN:	XXXXXXXXXX		
Alg In:	XXXXXXXXXX		
Lot 1:	9999999XXXX	Qty 1:	1000
Lot 2:	N/A	Qty 2:	0
D/C:	0101	Total Qty:	1000

Bag

#### Inner Carton Label [D]

4in x 6.5in

Allegro MicroSystems LLC		
(1K)Sales Order Number XXXXX	(P)Customer Part Number XXXXX	
(9D)Date Code XXXXX	(1T)Lot Number XXXXX	
(16K)Delivery XXXXX	(1P)Manufacturer Part # XXXXX	
(K)Purchase Order Number XXXXX		
Manufacturer ALLEGRO MICROSYSTEMS LLC		Made in XXXXXX

#### Outer Carton Label [E]

4in x 6.5in

Allegro MicroSystems LLC	
(1K)Sales Order Number XXXXX	(P)Customer Part Number XXXXXXXXXX
(16K)Delivery XXXXX	(Q)Quantity XXXXX
(1P)Manufacturer Part # XXXXX	
(K)Purchase Order Number XXXXX	
Manufacturer ALLEGRO MICROSYSTEMS LLC	

Made in XXXXXX

#### Outer Carton Address Label [F]

4in x 6.5in

ALLEGRO MICROSYSTEMS, LLC 115 NORTHEAST CUTOFF WORCESTER, MA 01606		
Ship To (Shipping Mark): ALLEGRO MICROSYSTEMS, LLC 115 NORTHEAST CUTOFF WORCESTER, MA 01606		
		Package 1/5

\* Label examples are shown for content purposes only. Labels are not shown to scale. Given label dimensions are approximate. As required, the necessary compliance symbols on the labels will meet the ship to country regulations.



## *LP-28 Package, TR Suffix*

### Revision History

Revision No.	Date	ECN No.	Description
OI	9/8/2015	1508036	ORIGINAL RELEASE
1	7/29/2016	CR-2016-02180	UPDATE LABEL FORMAT, UPDATE DESICCANT TO SINGLE PACK, UPDATE DOCUMENT NUMBER TO NEW FORMAT. ADD DISCLAIMER FOR COMPLIANCE SYMBOLS ON LABELS.
2	1/13/2017	CR-2016-00182	UPDATE TO NEW FORMAT. ADDITION OF ADDRESS LABEL.
3	1/19/2018	CR-2018-00370	UPDATE PACKAGE GRAPHIC. UPDATE LABEL GRAPHICS. ADD LABEL DIMENSIONS.

This document provides reference information that can be used to identify leadform and packing options offered by Allegro MicroSystems, LLC. This information is for reference only, and not for tooling use. This information is subject to change without notice. Packing and labelling for shipment may vary with device type, quantities, and other conditions; specifications may vary with contract terms and availability.

Packing options vary according to the individual device being offered. Refer to the device datasheet (visit our website at: [www.allegromicro.com](http://www.allegromicro.com)) for a listing of packing options for that device. Not all options are available for any particular package designation or device type, and provision of certain configurations may be subject to minimum volume or NCNR (noncancellation, nonreturn) limitations. Contact your local Allegro field service representative for additional information.

For more information on the physical appearance of device packages and leadforms, refer to the device datasheet or the application note *Allegro Package Designations* on the Allegro website.

When applicable, references are provided to industry standards, such as for tape and reel specifications standard package outline designations. These references are provided for informational purposes only, and do not necessarily indicate full conformity with that standard in all respects.

No dimensional tolerances are guaranteed or implied for bulk packing.

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