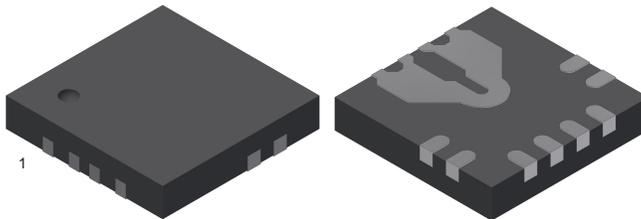
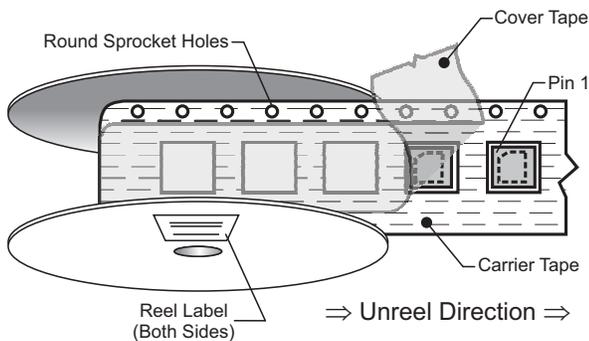


EX-12 Package, LT Suffix

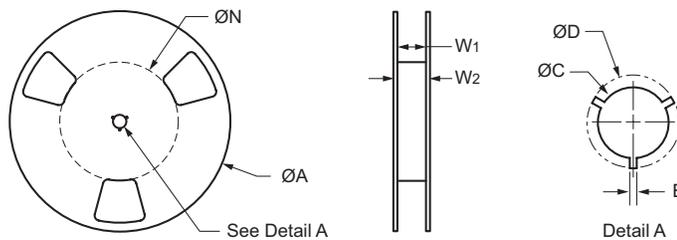


Footprint: 3 mm × 3 mm
 Contact Population: Four Sides (QFN)
 Contact Count: 12 plus exposed pad
 Non-JEDEC Standard



- Embossed tape and reel
- Contacts inward
- Pin 1 on trailing device edge, sprocket hole side
- 1500 devices per 7 in. reel
- 40-50 trailer pockets
- 75-80 leader pockets

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

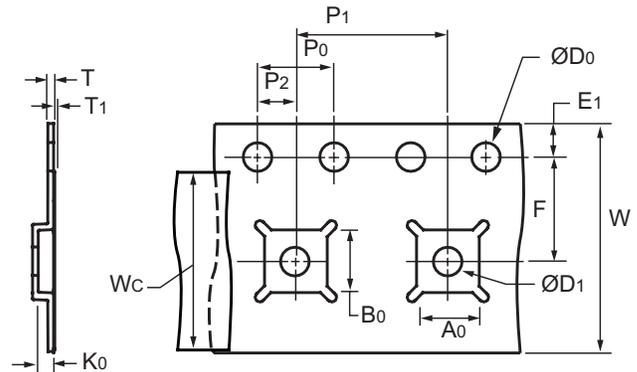


Access hole and hub configuration may vary at supplier discretion within limits shown

Dimensions in mm

Type	A	B	C	D	N
Plastic 7 in. (Nom)	178 (Nom)	1.5 (Min)	13 ^{+0.5} _{-0.2}	20.2 (Min)	60 (Nom)
W₁ (inside, at Hub)			12.4 (+2.0/-0.0)		
W₂ (outside, at Hub)			18.4 (Max)		

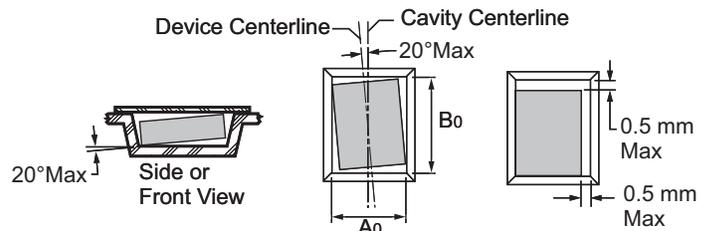
Reference EIA 481



Dimensions in mm, may vary with supplier

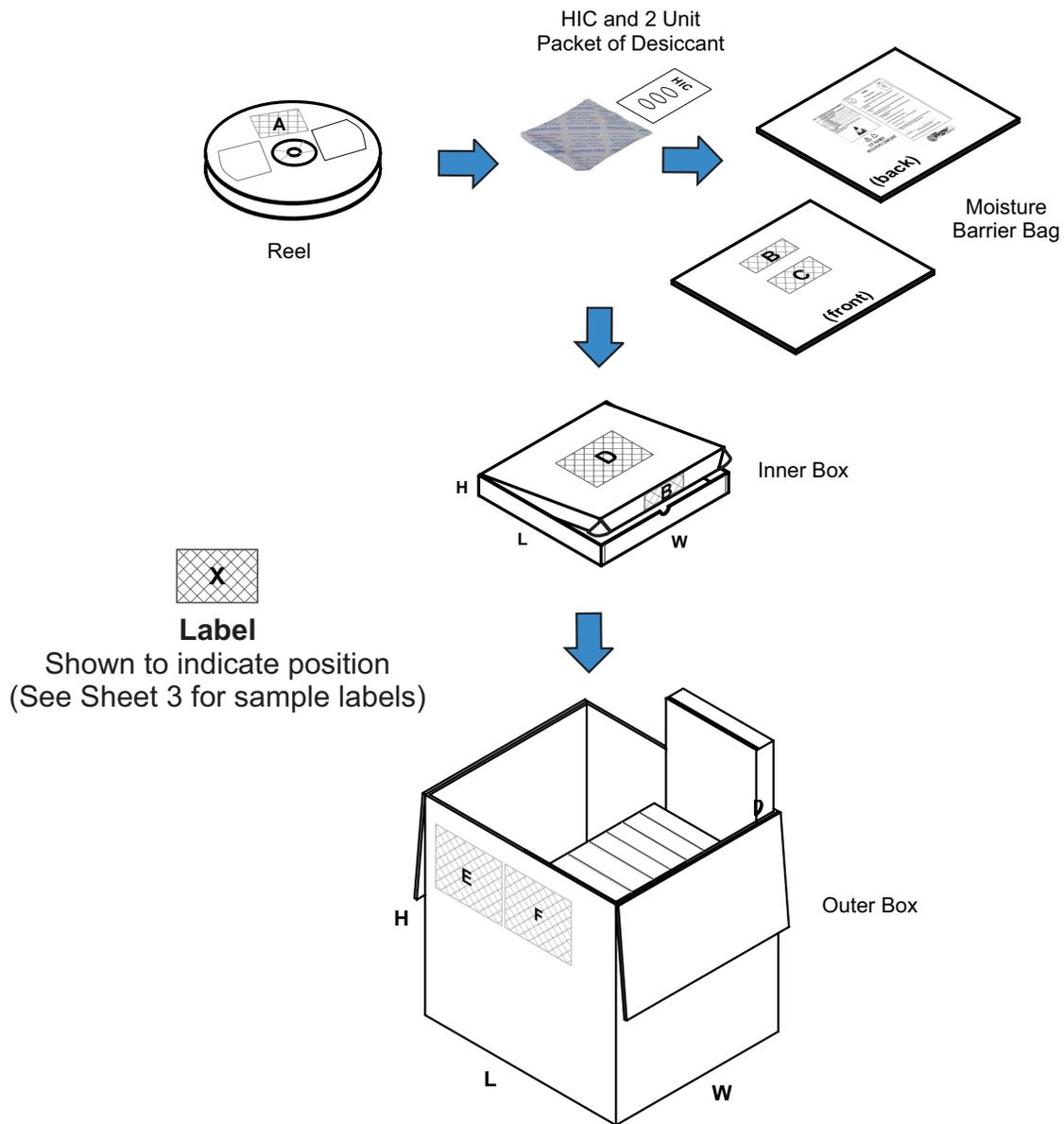
Carrier Tape			Cover Tape
W: 12.00 ±.3	D ₀ : 1.50 +.1/-0	A ₀ : 3.30	W _C : 9.1
E ₁ : 1.75 ±.1	P ₀ : 4.00 ±.1	B ₀ : 3.30	T ₁ : 0.061 (0.1 MAX)
F: 5.50 ±.05	P ₁ : 8.00 ±.1	K ₀ : 1.10	
T: 0.30 (0.6 MAX)	P ₂ : 2.00 ±.05	D ₁ : 1.50 MIN	

1. Pocket centerlines to cavity center, not to pocket detection hole.
2. A₀ and B₀ measured 0.3 mm above bottom of pocket.



Reference EIA 481

EX-12 Package, LT Suffix



Carton Dimensions (mm)

Type	Length	Width	Height	Inner Carton Standard Quantity	Outer Carton Standard Quantity
TC14	190	205	35	1500	
TC11A	245	214	212		9000
TC11	321	318	291		18000
TC17A	553	403	400		72000

* 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.

EX-12 Package, LT Suffix

Reel Production Label [A]

1.125in x 4in



Part (P) A123456XXX-XXXXXXXX-XXXXXXXX
 Mfr PN (1P) A123456-XXXX-XXXX
 Qty (Q) 1000
 Lot (1T) 1234567XXXX Qty (1Q) 1000
 Lot 2 (2T) N/A Qty (2Q) 0

Moisture Sensitive Device
 Peak Reflow 260°C



MS-Level (13E) 2
 Reel _____ Date (12D) 2019-01-01



Moisture Barrier Bag / Box Flap Label [B]

1.125in x 4in



Part (P) A123456XXX-XXXXXXXX-XXXXXXXX
 Mfr PN (1P) A123456-XXXX-XXXX
 Qty (Q) 1000
 Lot (1T) 1234567XXXX Qty (1Q) 1000
 Lot 2 (2T) N/A Qty (2Q) 0

Moisture Sensitive Device
 Peak Reflow 260°C



MS-Level (13E) 2
 Date (12D) 2019-01-01



1D Production Label [C]

2.5in x 3.75in

00000000

Allegro MicroSystems
 Manchester, NH 03103 USA



Cust PN: 999999XXX-XXX99999XX_00000000



Mfr PN: 999999XXX-XXX99999XX_00000000



Alg In: 000000XXX-XXX00000XX

Lot 1: 1234567XXXX Qty 1: 10000
 Lot 2: 1234567XXXX Qty 2: 5000
 D/C: 1234 Total Qty: 15000



Inner Carton Label [D]

4in x 6.5in



Allegro MicroSystems
 Manchester, NH 03103, USA

(4L) Made In United States

(P) Customer Part
 A12345XXX-XXXXXXXX-00000000

(1K) Sales Order
 00000000

(1P) Manufacturer Part
 A12345XXX-XXXXXXXX-00000000

(9D) Date Code
 1234

(1T) Lot
 1234567XXXX

(Q) Quantity
 100000

(K) Purchase Order
 000000000-000000000

(16K) Delivery
 00000000






Outer Carton Label [E]

4in x 6.5in



Allegro MicroSystems
 Manchester, NH 03103, USA

(4L) Made In United States

(P) Customer Part
 A12345XXX-XXXXXXXX-00000000

(1K) Sales Order
 00000000

(1P) Manufacturer Part
 A12345XXX-XXXXXXXX-00000000

(Q) Quantity
 100000

(K) Purchase Order
 000000000-000000000

(16K) Delivery
 00000000







Outer Carton Address Label [F]

4in x 6.5in



Allegro MicroSystems
 955 Perimeter Rd
 Manchester, NH 03103
 United States

Ship To (Shipping Mark):
 Allegro MicroSystems
 ATTN: Corporate Label Team
 955 Perimeter Rd
 Manchester, NH 03103



Package 1 / 1

* 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.

EX-12 Package, LT Suffix

Revision History

Revision No.	Date	ECN No.	Description
OI	2/5/2015	1501058	ORIGINAL RELEASE
A	9/8/2015	1508040	REVISED CARTON DETAILS - ADDED CORPORATE PRINTED BAG, LABEL AND LABEL POSITIONS.
1	7/22/2016	CR-2016-02126	UPDATE LABEL FORMAT, ADD FLAP LABEL, UPDATE DESICCANT QTY, UPDATE DOC. NUMBER
2	4/19/2019	CR-2019-01678	UPDATE PACKAGE AND ORIENTATION GRAPHICS. ADD EIA STANDARD TOLERANCES. ADD NON-JEDEC STANDARD REFERENCE. UPDATE PACKING GRAPHIC AND OPTIONS TABLE. UPDATE LABEL GRAPHICS. ADD ADDRESS LABEL AND LABEL DIMENSIONS. UPDATE COPYRIGHT DATE AND ALLEGRO ADDRESS. UPDATE LOGO.

This document provides reference information that can be used to identify leadform and packing options offered by Allegro MicroSystems. 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) 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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