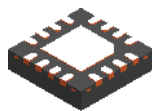


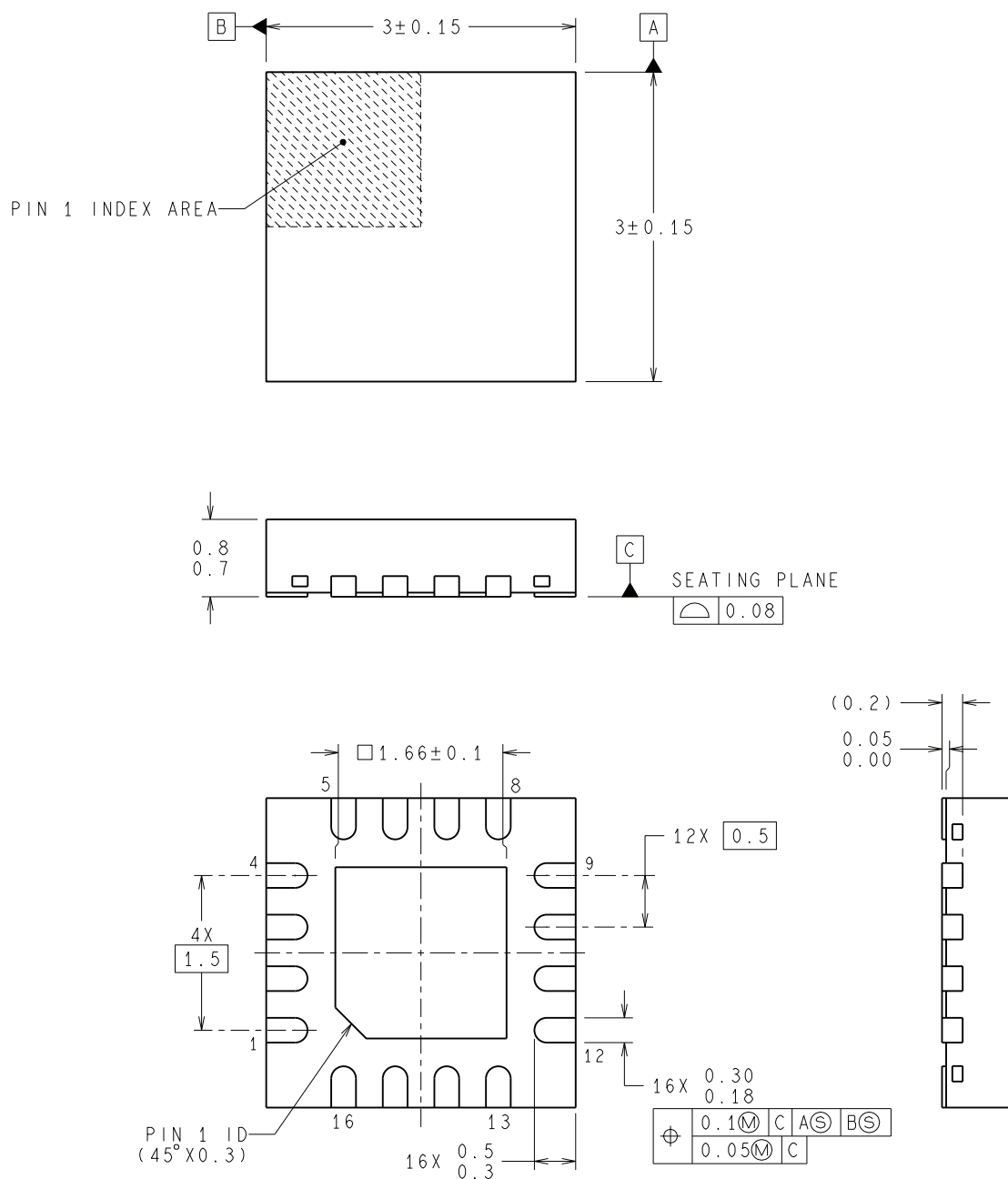
To request a full data sheet, please send an email to:  
[display\\_contact@list.ti.com](mailto:display_contact@list.ti.com).

RTE0016A



WQFN - 0.8mm max height

QFN (PLASTIC QUAD FLATPACK - NO LEAD)



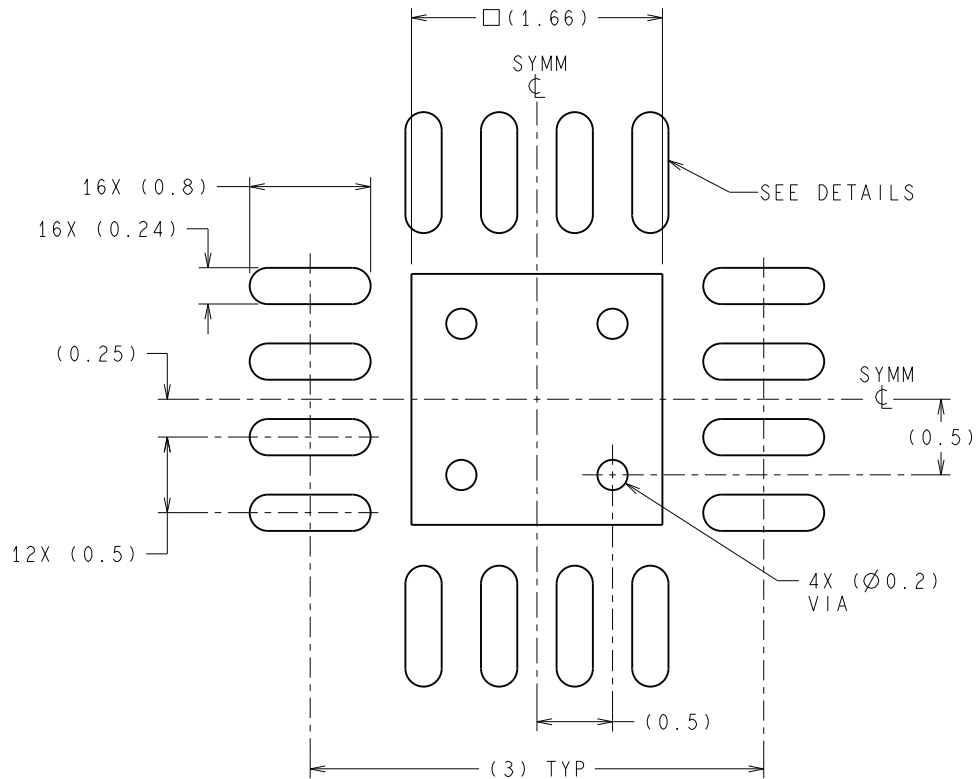
4215266/A 07/2012

- NOTES:
1. DIMENSIONS ARE IN MILLIMETERS. DIMENSIONS IN PARENTHESIS ARE FOR REFERENCE ONLY.
  2. THIS DRAWING IS SUBJECT TO CHANGE WITHOUT NOTICE.
  3. THE PACKAGE THERMAL PAD MUST BE SOLDERED TO THE PRINTED CIRCUIT BOARD FOR THERMAL AND MECHANICAL PERFORMANCE.
  4. S-PWQFN-N16.
  5. REFERENCE JEDEC REGISTRATION MO-220.

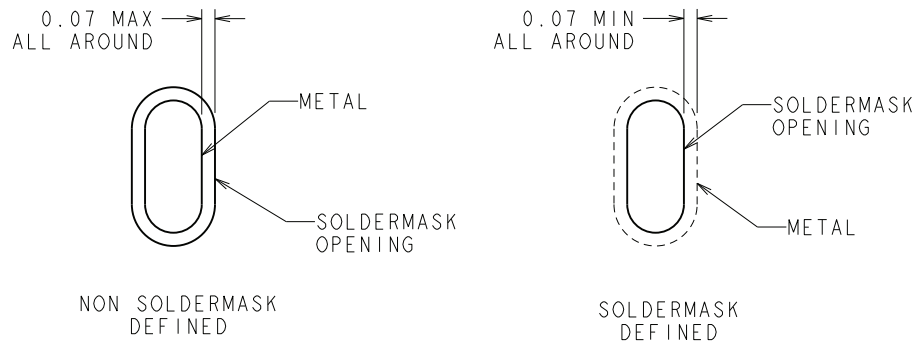
RTE0016A

WQFN - 0.8mm max height

QFN (PLASTIC QUAD FLATPACK - NO LEAD)



RECOMMENDED LAND PATTERN



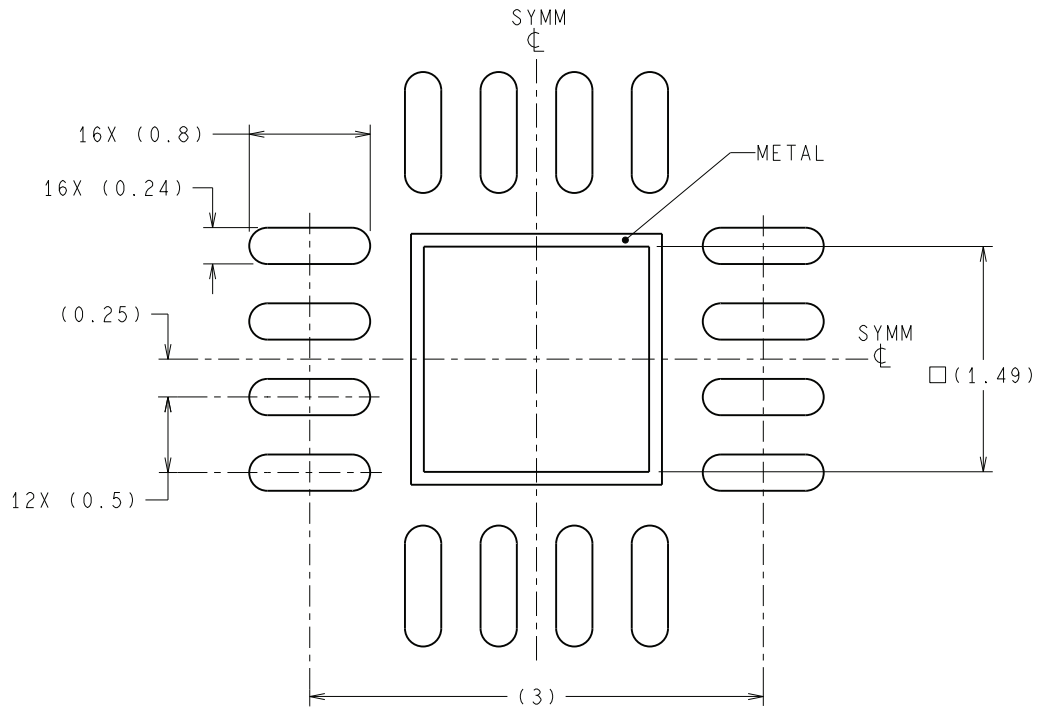
SOLDERMASK DETAILS

4215266/A 07/2012

RTE0016A

WQFN - 0.8mm max height

QFN (PLASTIC QUAD FLATPACK - NO LEAD)



**RECOMMENDED STENCIL**  
EXPOSED PAD  
80% PRINTED SOLDER COVERAGE BY AREA

4215266/A 07/2012

## PACKAGING INFORMATION

Orderable Device	Status <sup>(1)</sup>	Pack Type	Pack Drawing	Pins	Pack Qty	Eco Plan <sup>(2)</sup>	Lead/ Ball Finish	MSL Peak Temp <sup>(3)</sup>
TPS65632ARTER	ACTIVE	WQFN	RTE	16	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YR
TPS65632ARTET	ACTIVE	WQFN	RTE	16	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YR
TPS65632AGRTET	ACTIVE	WQFN	RTE	16	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YR
TPS65632AGRTET	ACTIVE	WQFN	RTE	16	250	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YR

(1) The marketing status values are defined as follows:

**ACTIVE:** Product device recommended for new designs.

**LIFEBUY:** TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

**NRND:** Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

**PREVIEW:** Device has been announced but is not in production. Samples may or may not be available.

**OBSOLETE:** TI has discontinued the production of the device.

(2) Eco Plan -The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) -please check <http://www.ti.com/productcontent> for the latest availability information and additional product content details.

**TBD:** The Pb-Free/Green conversion plan has not been defined.

**Pb-Free (RoHS):** TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes.

**Pb-Free (RoHS Exempt):** This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and lead frame. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.

**Green (RoHS & no Sb/Br):** TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

(3) MSL, Peak Temp. --The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications and peak solder temperature.

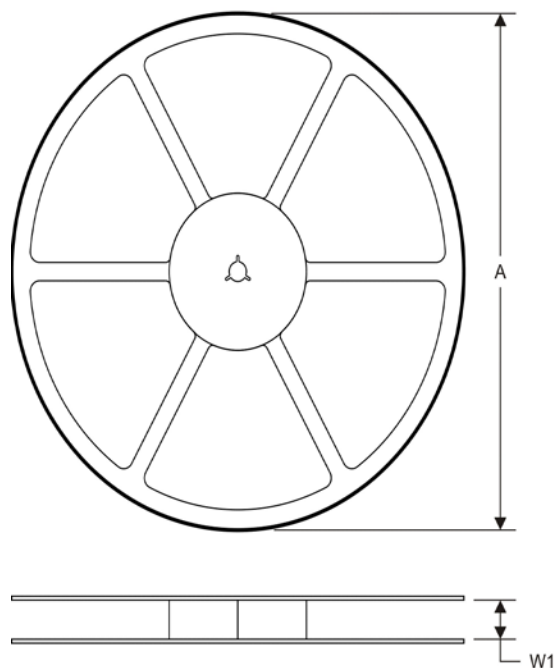
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## TAPE AND REEL INFORMATION

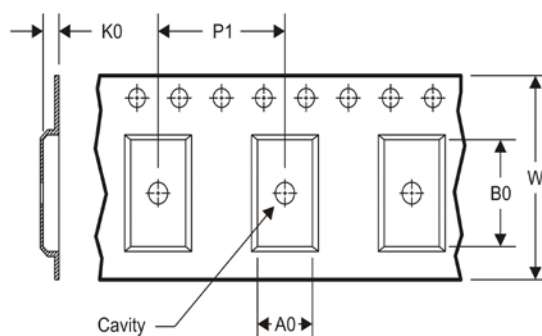
### TAPE AND REEL INFORMATION

#### REEL DIMENSIONS



#### TAPE AND REEL INFORMATION

#### TAPE DIMENSIONS

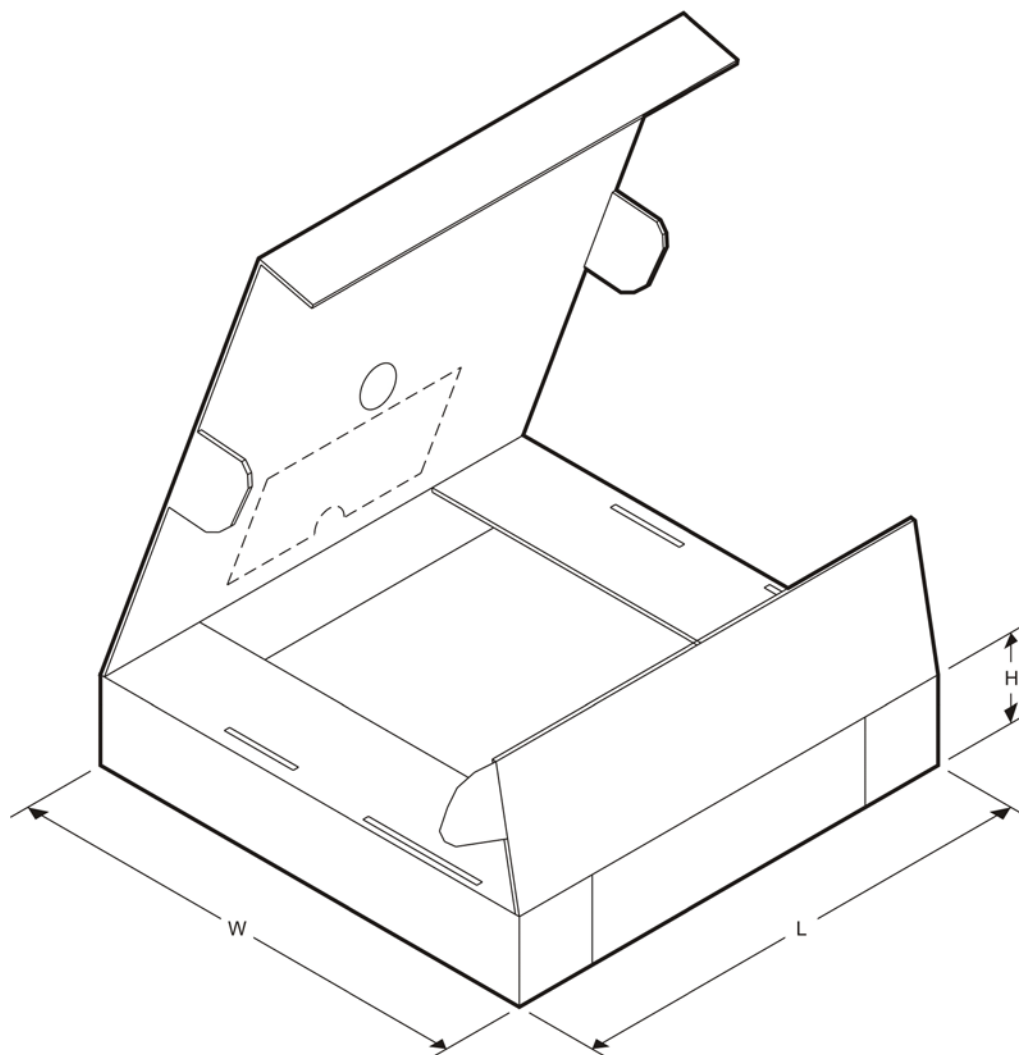


A0	Dimension designed to accommodate the component width
B0	Dimension designed to accommodate the component length
K0	Dimension designed to accommodate the component thickness
W	Overall width of the carrier tape
P1	Pitch between successive cavity centers

\*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
TPS65632ARTER	WQFN	RTE	16	3000	330.0	12.4	3.3	3.3	1.1	8.0	12.0	Q2
TPS65632ARTET	WQFN	RTE	16	250	180.0	12.4	3.3	3.3	1.1	8.0	12.0	Q2
TPS65632AGRTER	WQFN	RTE	16	3000	330.0	12.4	3.3	3.3	1.1	8.0	12.0	Q2
TPS65632AGRTET	WQFN	RTE	16	3000	330.0	12.4	3.3	3.3	1.1	8.0	12.0	Q2

## TAPE AND REEL BOX DIMENSIONS



\*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
TPS65632ARTER	WQFN	RTE	16	3000	367.0	367.0	35.0
TPS65632ARTET	WQFN	RTE	16	250	210.0	185.0	35.0
TPS65632AGRTER	WQFN	RTE	16	3000	367.0	367.0	35.0
TPS65632GARTET	WQFN	RTE	16	250	210.0	185.0	35.0

## PACKAGING INFORMATION

Orderable Device	Status (1)	Package Type	Package Drawing	Pins	Package Qty	Eco Plan (2)	Lead/Ball Finish	MSL Peak Temp (3)	Op Temp (°C)	Top-Side Markings (4)	Samples
TPS65632AGRTER	ACTIVE	WQFN	RTE	16	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR		SIH	<a href="#">Samples</a>
TPS65632ARTER	ACTIVE	WQFN	RTE	16	3000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	SEM	<a href="#">Samples</a>
TPS65632ARTET	PREVIEW	WQFN	RTE	16	250	TBD	Call TI	Call TI	-40 to 85		

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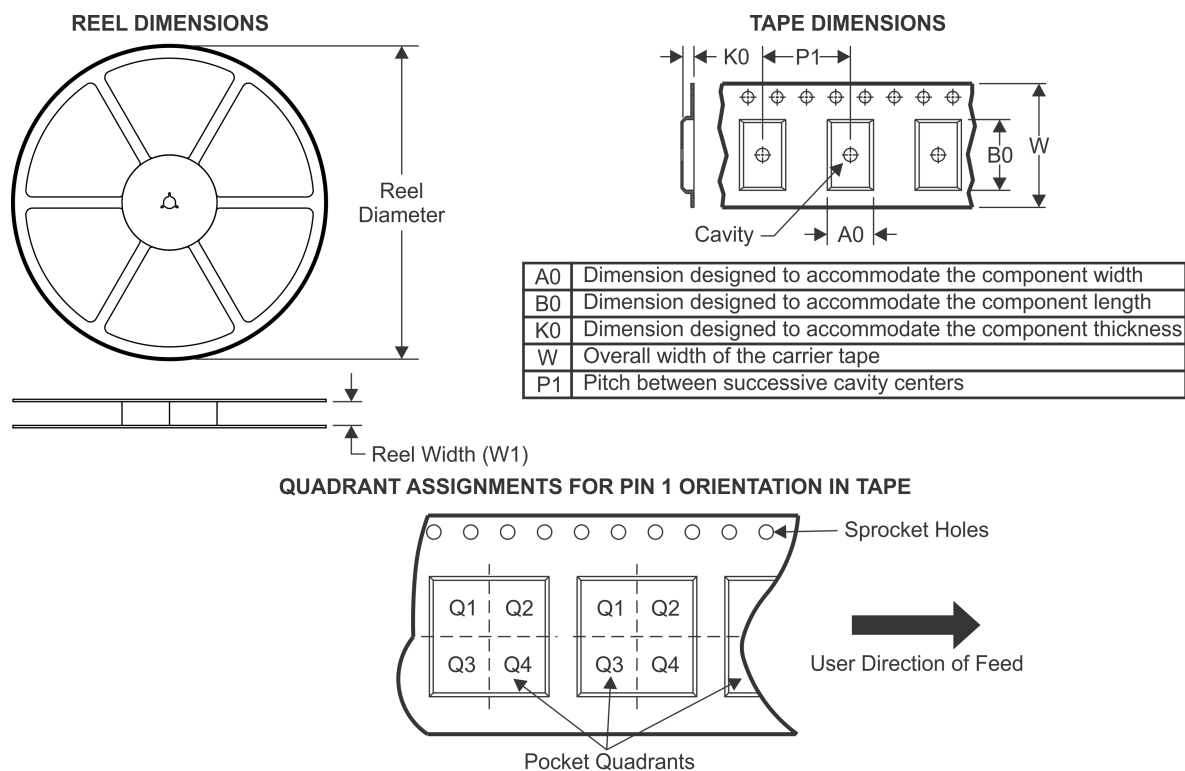
**Green (RoHS & no Sb/Br):** TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

(3) MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

(4) Multiple Top-Side Markings will be inside parentheses. Only one Top-Side Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Top-Side Marking for that device.

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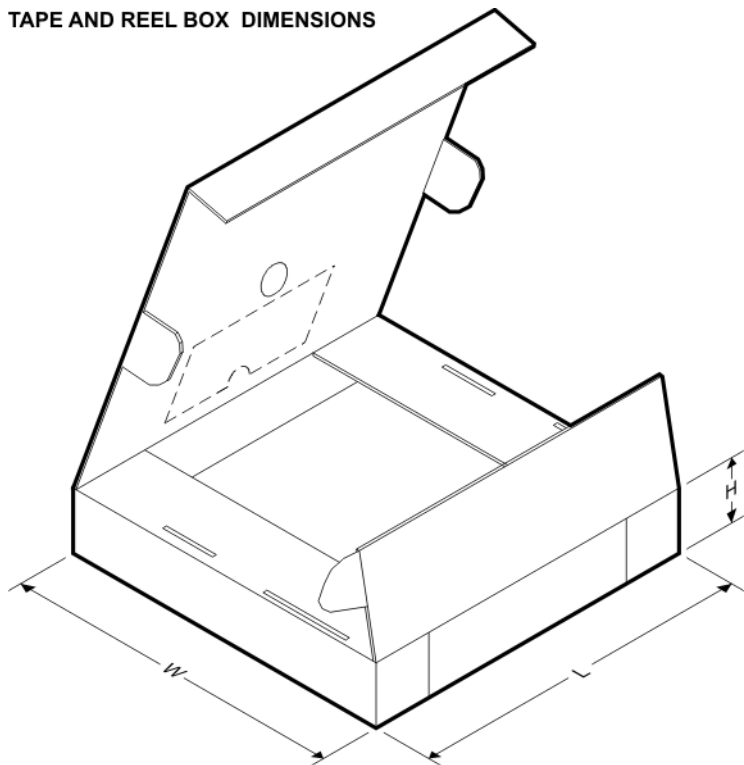
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**TAPE AND REEL INFORMATION**


\*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
TPS65632AGRTER	WQFN	RTE	16	3000	330.0	12.4	3.3	3.3	1.1	8.0	12.0	Q2
TPS65632ARTER	WQFN	RTE	16	3000	330.0	12.4	3.3	3.3	1.1	8.0	12.0	Q2

## TAPE AND REEL BOX DIMENSIONS



\*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
TPS65632AGRTER	WQFN	RTE	16	3000	367.0	367.0	35.0
TPS65632ARTER	WQFN	RTE	16	3000	367.0	367.0	35.0

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