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4 器件比较

表 4-1. 器件比较

器件		RDS _(ON) (mΩ)
LMG3105R011VBER	LMG3104R011VBER	1.1
LMG3105R017VBER ⁽¹⁾	LMG3104R017VBER	1.7

(1) 预发布信息 (非预告信息)

表 4-2. 特性比较

器件型号	IIM 模式下的互锁	IDM 处于关断切换状态
LMG3104Rxxx	启用	启用
LMG3105Rxxx	禁用	禁用

5 器件和文档支持

5.1 文档支持

5.1.1 相关文档

如要查看相关文件，请参阅以下内容：

- 德州仪器 (TI), [LMG5200 GaN 功率级布局设计要点 应用手册](#)
- 德州仪器 (TI), [使用 LMG5200 : GaN 半桥功率级 EVM 用户指南](#)
- 德州仪器 (TI), [AN-2029 操作和处理建议 应用手册](#)

5.2 接收文档更新通知

要接收文档更新通知，请导航至 [ti.com](#) 上的器件产品文件夹。点击 [通知](#) 进行注册，即可每周接收产品信息更改摘要。有关更改的详细信息，请查看任何已修订文档中包含的修订历史记录。

5.3 支持资源

[TI E2E™ 中文支持论坛](#) 是工程师的重要参考资料，可直接从专家处获得快速、经过验证的解答和设计帮助。搜索现有解答或提出自己的问题，获得所需的快速设计帮助。

链接的内容由各个贡献者“按原样”提供。这些内容并不构成 TI 技术规范，并且不一定反映 TI 的观点；请参阅 TI 的 [使用条款](#)。

5.4 商标

TI E2E™ is a trademark of Texas Instruments.

所有商标均为其各自所有者的财产。

5.5 静电放电警告



静电放电 (ESD) 会损坏这个集成电路。德州仪器 (TI) 建议通过适当的预防措施处理所有集成电路。如果不遵守正确的处理和安装程序，可能会损坏集成电路。

ESD 的损坏小至导致微小的性能降级，大至整个器件故障。精密的集成电路可能更容易受到损坏，这是因为非常细微的参数更改都可能会导致器件与其发布的规格不相符。

5.6 术语表

[TI 术语表](#) 本术语表列出并解释了术语、首字母缩略词和定义。

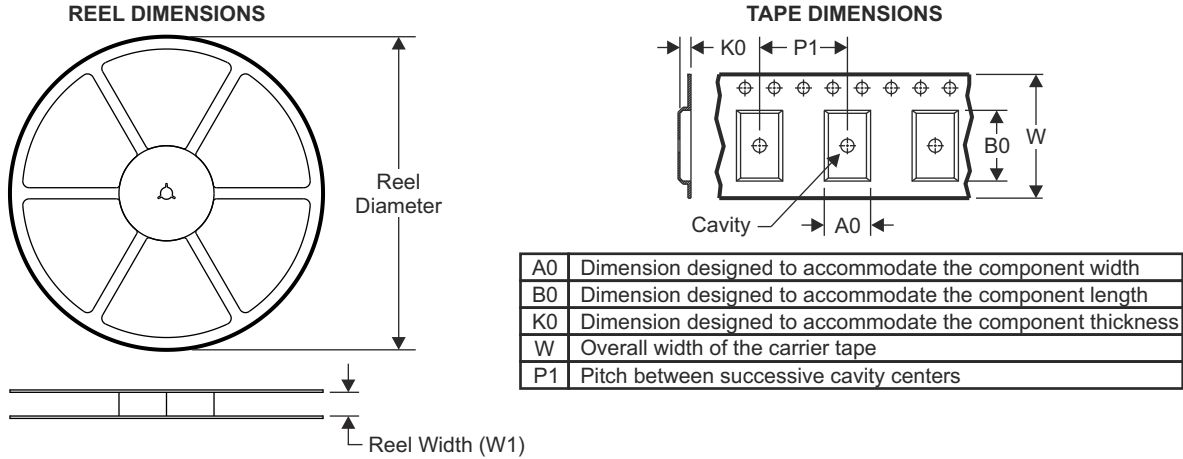
6 修订历史记录

日期	修订版本	注释
May 2026	*	初始发行版

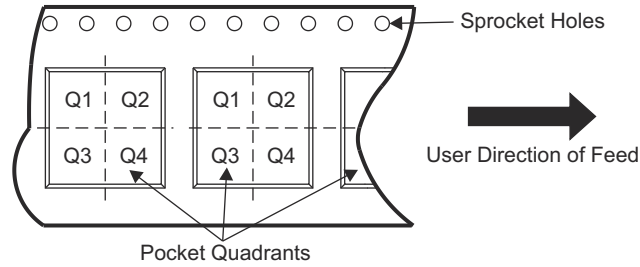
7 机械、封装和可订购信息

以下页面包含机械、封装和可订购信息。这些信息是指定器件可用的最新数据。数据如有变更，恕不另行通知，且不会对此文档进行修订。有关此数据表的浏览器版本，请查阅左侧的导航栏。

7.1 卷带包装信息

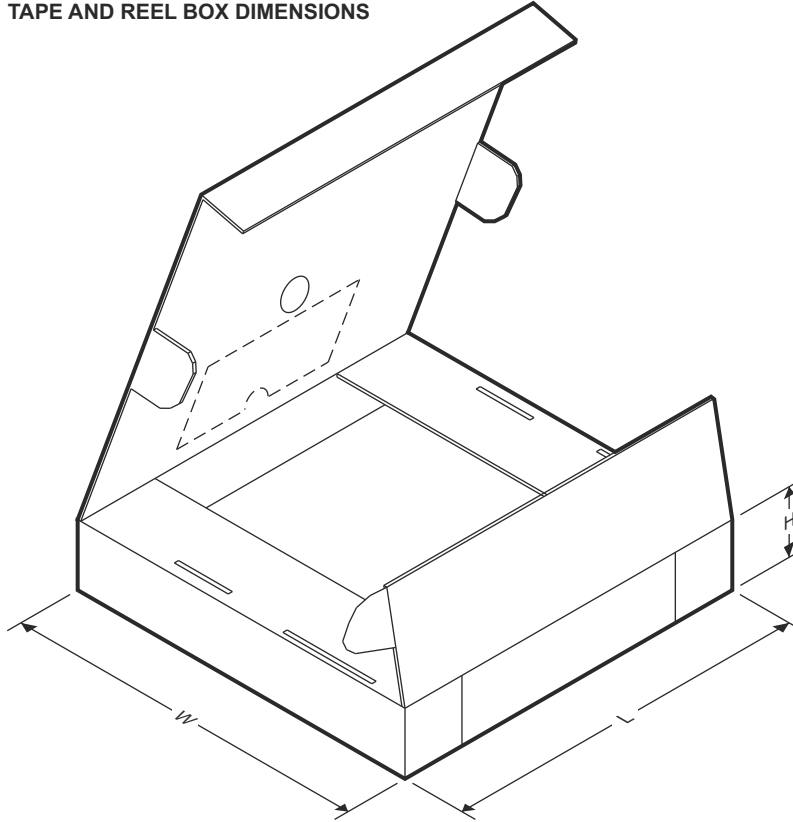


QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



器件	封装类型	封装图	引脚	SPQ	卷带直径 (mm)	卷带宽度 W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 象限
LMG3104R011VBER	VQFN-FCRLF	VBE	15	2000	330	16.4	4.3	6.8	1.1	8.0	16.0	Q1
LMG3104R017VBER	VQFN-FCRLF	VBE	15	2000	330	16.4	4.3	6.8	1.1	8.0	16.0	Q1
LMG3105R011VBER	VQFN-FCRLF	VBE	15	2000	330	16.4	4.3	6.8	1.1	8.0	16.0	Q1
LMG3105R017VBER (预发布)	VQFN-FCRLF	VBE	15	2000	330	16.4	4.3	6.8	1.1	8.0	16.0	Q1

TAPE AND REEL BOX DIMENSIONS

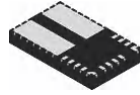


ADVANCE INFORMATION

器件	封装类型	封装图	引脚	SPQ	长度 (mm)	宽度 (mm)	高度 (mm)
LMG3104R011VBER	VQFN-FCRLF	VBE	15	2000	336.6	336.6	28.6
LMG3104R017VBER	VQFN-FCRLF	VBE	15	2000	336.6	336.6	28.6
LMG3105R011VBER	VQFN-FCRLF	VBE	15	2000	336.6	336.6	28.6
LMG3105R017VBER (预发布)	VQFN-FCRLF	VBE	15	2000	336.6	336.6	28.6

7.2 机械数据

LMG310xR0xx 器件封装被评级为 MSL3 封装 (湿敏等级 3)。有关 MSL3 封装的具体操作和处理建议, 请参阅 [AN-2029 操作和处理建议应用报告](#)。

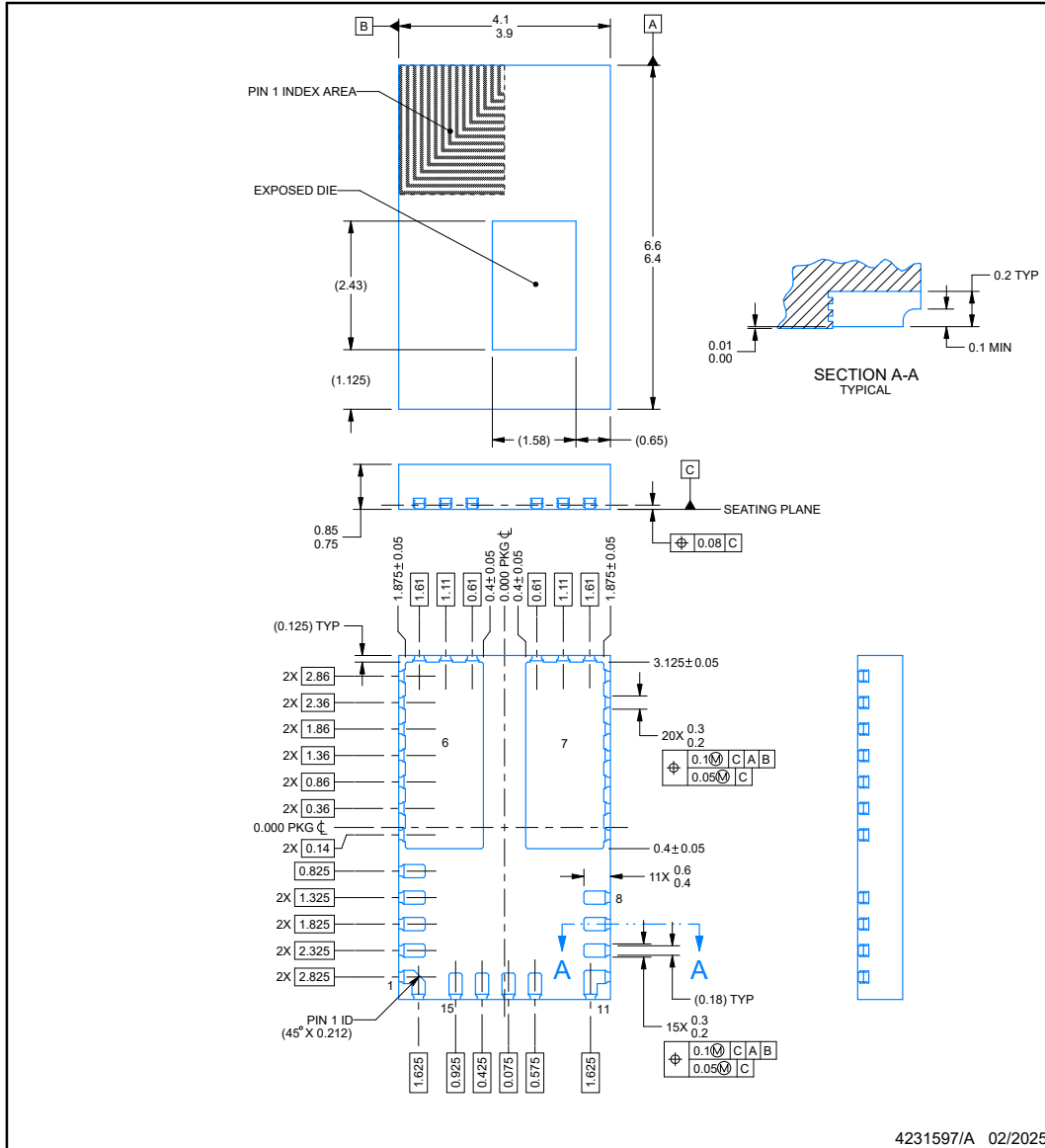


PACKAGE OUTLINE

VBE0015A-C01

VQFN-FCRLF - 0.85 mm max height

PLASTIC QUAD FLATPACK - NO LEAD



NOTES:

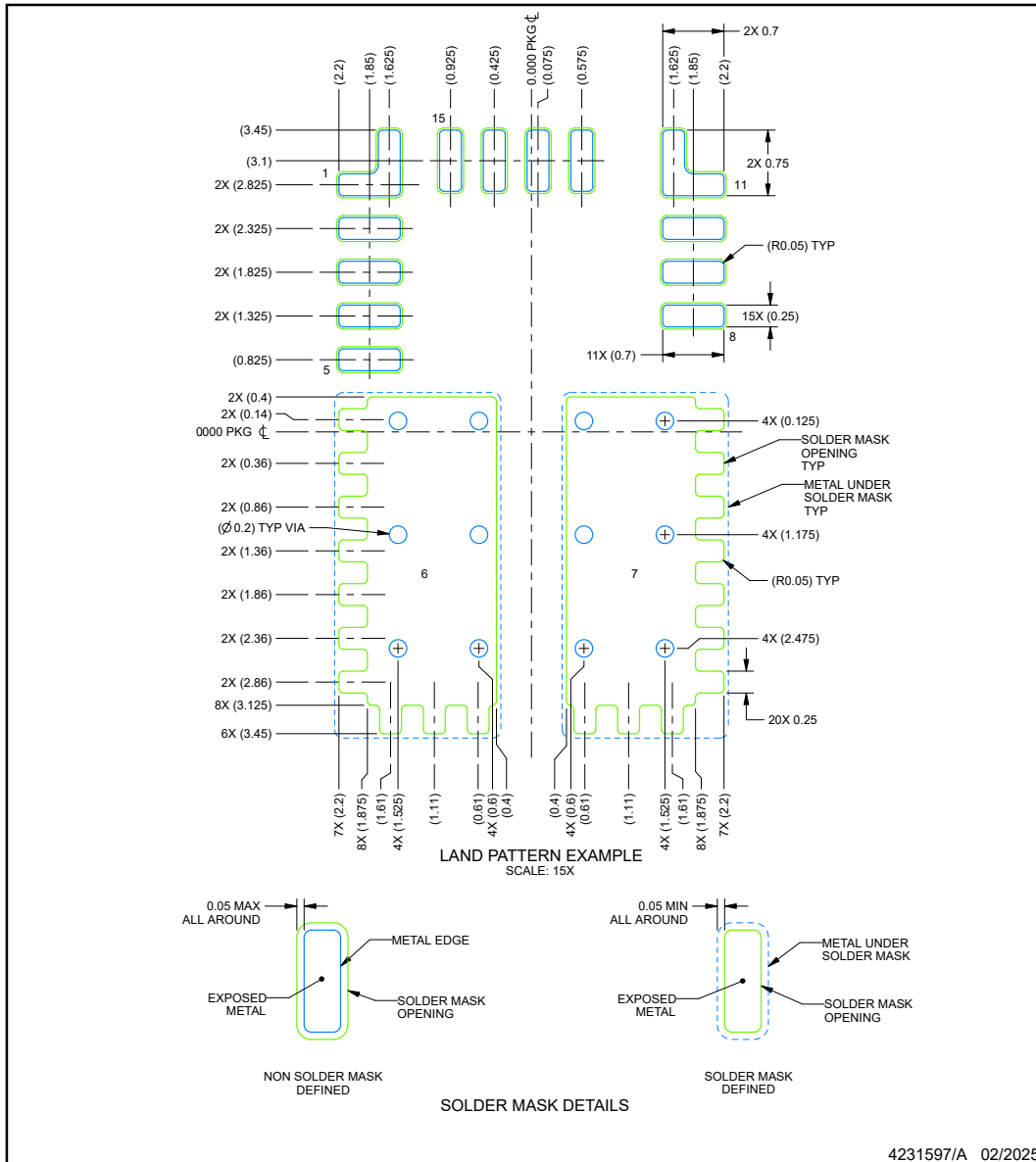
1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M.
2. This drawing is subject to change without notice.
3. The package thermal pad must be soldered to the printed circuit board for thermal and mechanical performance.

EXAMPLE BOARD LAYOUT

VBE0015A-C01

VQFN-FCRLF - 0.85 mm max height

PLASTIC QUAD FLATPACK - NO LEAD



NOTES: (continued)

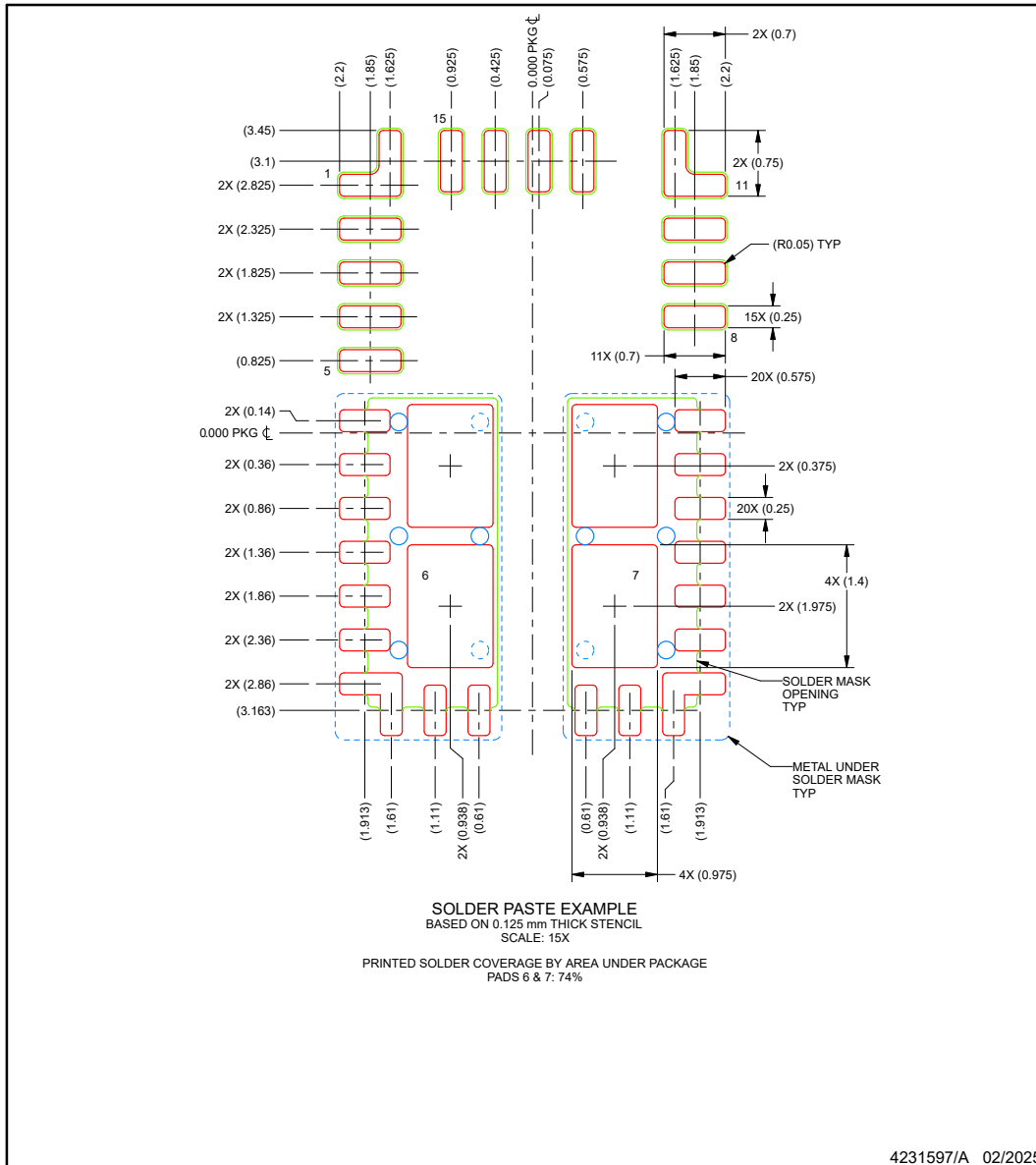
- This package is designed to be soldered to a thermal pad on the board. For more information, see Texas Instruments literature number SLUA271 (www.ti.com/lit/slua271).
- Vias are optional depending on application, refer to device data sheet. If any vias are implemented, refer to their locations shown on this view. It is recommended that vias under paste be filled, plugged or tented.

EXAMPLE STENCIL DESIGN

VBE0015A-C01

VQFN-FCRLF - 0.85 mm max height

PLASTIC QUAD FLATPACK - NO LEAD



NOTES: (continued)

6. Laser cutting apertures with trapezoidal walls and rounded corners may offer better paste release. IPC-7525 may have alternate design recommendations.

ADVANCE INFORMATION

PACKAGING INFORMATION

Orderable part number	Status (1)	Material type (2)	Package Pins	Package qty Carrier	RoHS (3)	Lead finish/ Ball material (4)	MSL rating/ Peak reflow (5)	Op temp (°C)	Part marking (6)
XLMG3104R011VBER	Active	Preproduction	VQFN-FCRLF (VBE) 15	2500 LARGE T&R	-	Call TI	Call TI	-40 to 125	

(1) **Status:** For more details on status, see our [product life cycle](#).

(2) **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

(3) **RoHS values:** Yes, No, RoHS Exempt. See the [TI RoHS Statement](#) for additional information and value definition.

(4) **Lead finish/Ball material:** Parts may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

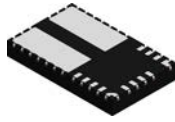
(5) **MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.

(6) **Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "~" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

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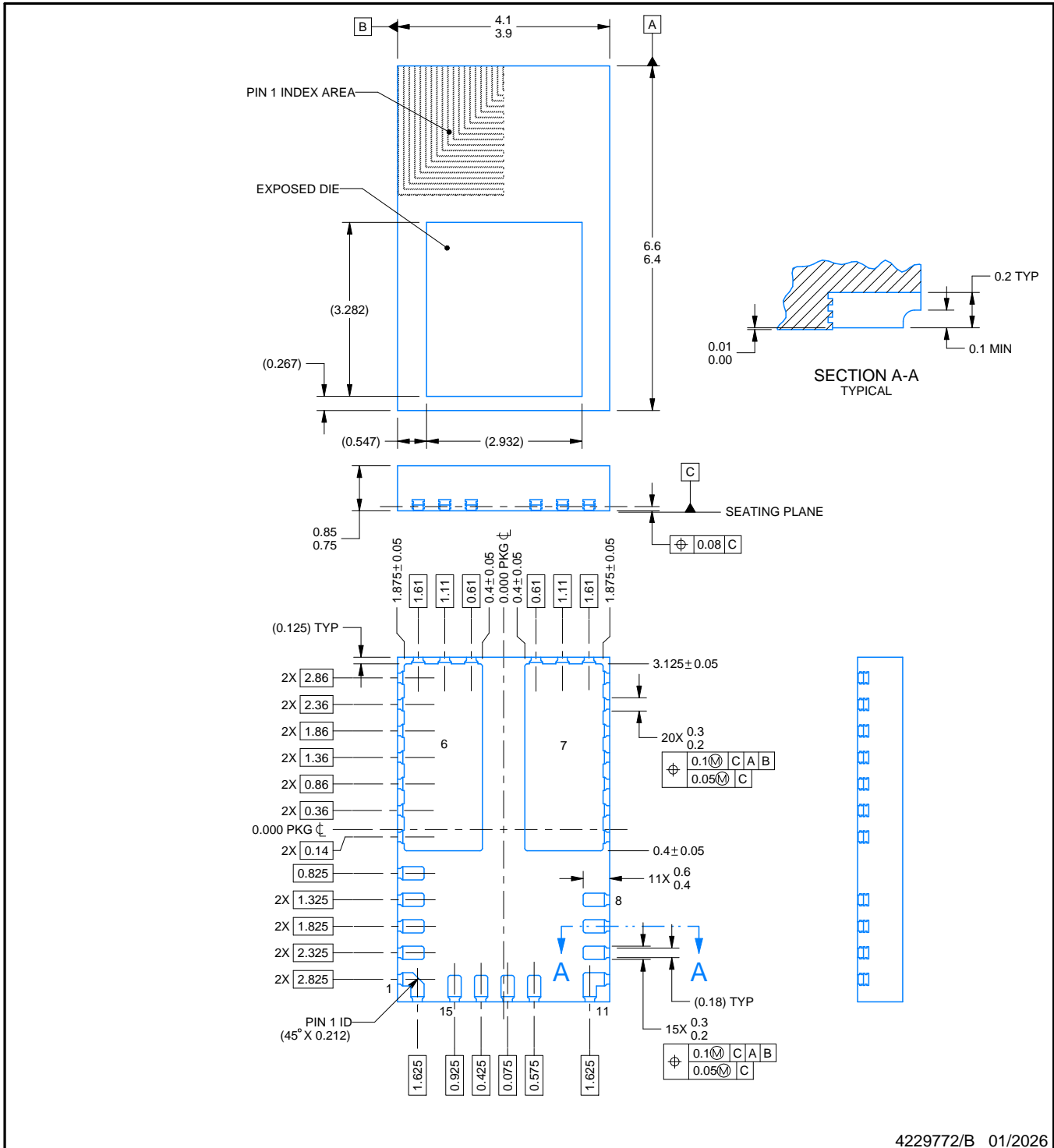


PACKAGE OUTLINE

VBE0015A

VQFN-FCRLF - 0.85 mm max height

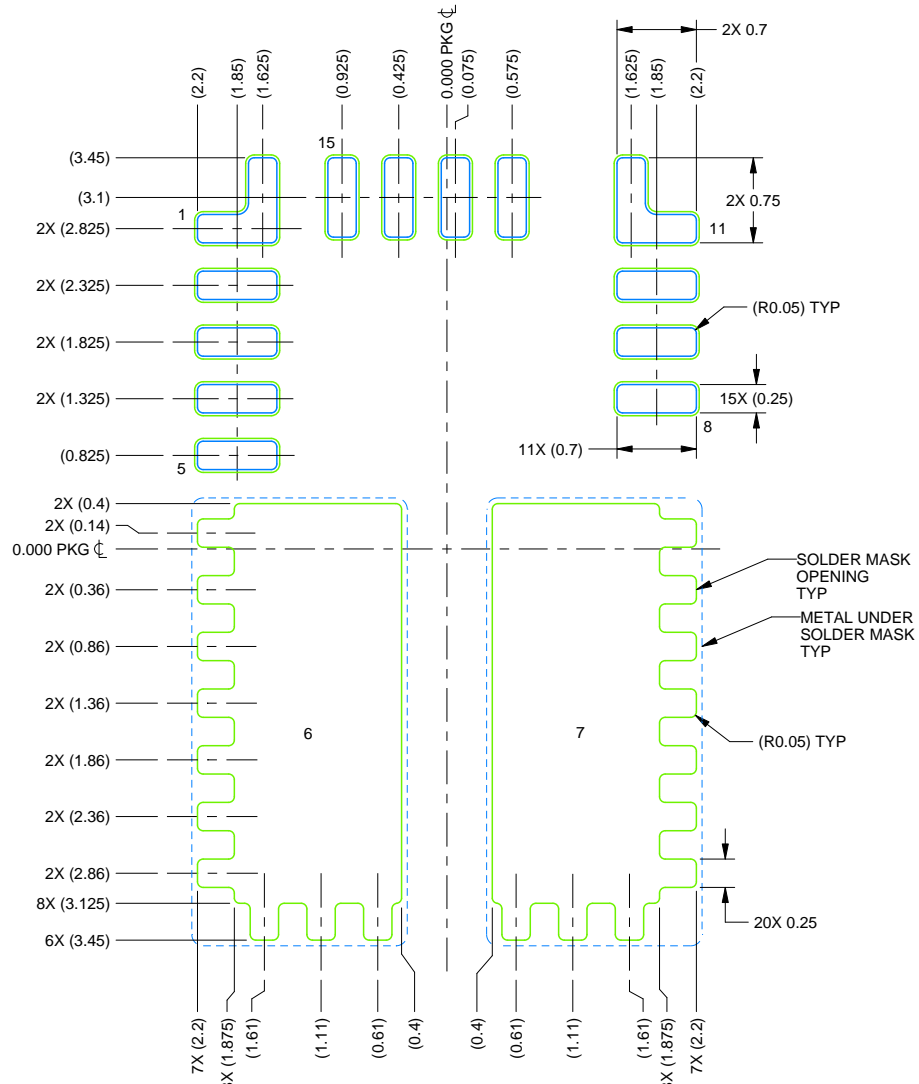
PLASTIC QUAD FLATPACK - NO LEAD



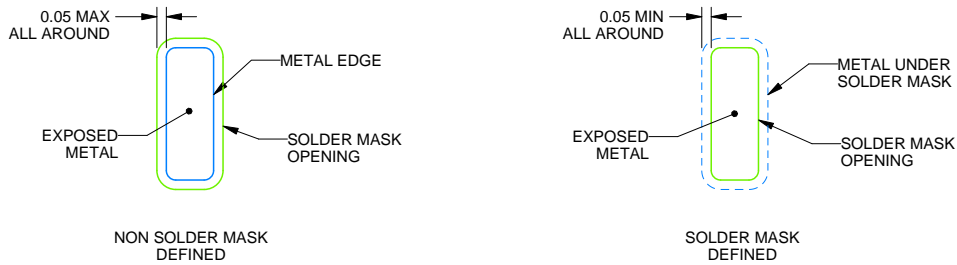
4229772/B 01/2026

NOTES:

1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M.
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.



LAND PATTERN EXAMPLE
SCALE: 15X



SOLDER MASK DETAILS

NOTES: (continued)

- 4. This package is designed to be soldered to a thermal pad on the board. For more information, see Texas Instruments literature number SLUA271 (www.ti.com/lit/slua271).
- 5. Vias are optional depending on application, refer to device data sheet. If any vias are implemented, refer to their locations shown on this view. It is recommended that vias under paste be filled, plugged or tented.

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最后更新日期：2025 年 10 月