

SOT1938-1

HQFN23, thermal enhanced quad flat package, no leads, 23 terminals, 0.9 mm pitch, 12 mm x 12 mm x 2.1 mm body

25 January 2019

Package information

1 Package summary

Terminal position code	Q (quad)
Package type descriptive code	HQFN23
Package type industry code	HQFN23
Package style descriptive code	HQFN (thermal enhanced quad flatpack; no leads)
Mounting method type	S (surface mount)
Issue date	03-07-2018
Manufacturer package code	98ASA00428D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	-	12	-	mm
package width	-	12	-	mm
seated height	-	2.1	-	mm
nominal pitch	-	0.9	-	mm
actual quantity of termination	-	23	-	



HQFN23, thermal enhanced qual flat package, no leads, 23 terminals, 0.9 mm pitch, 12 mm x 12 mm x 2.1 mm body

2 Package outline

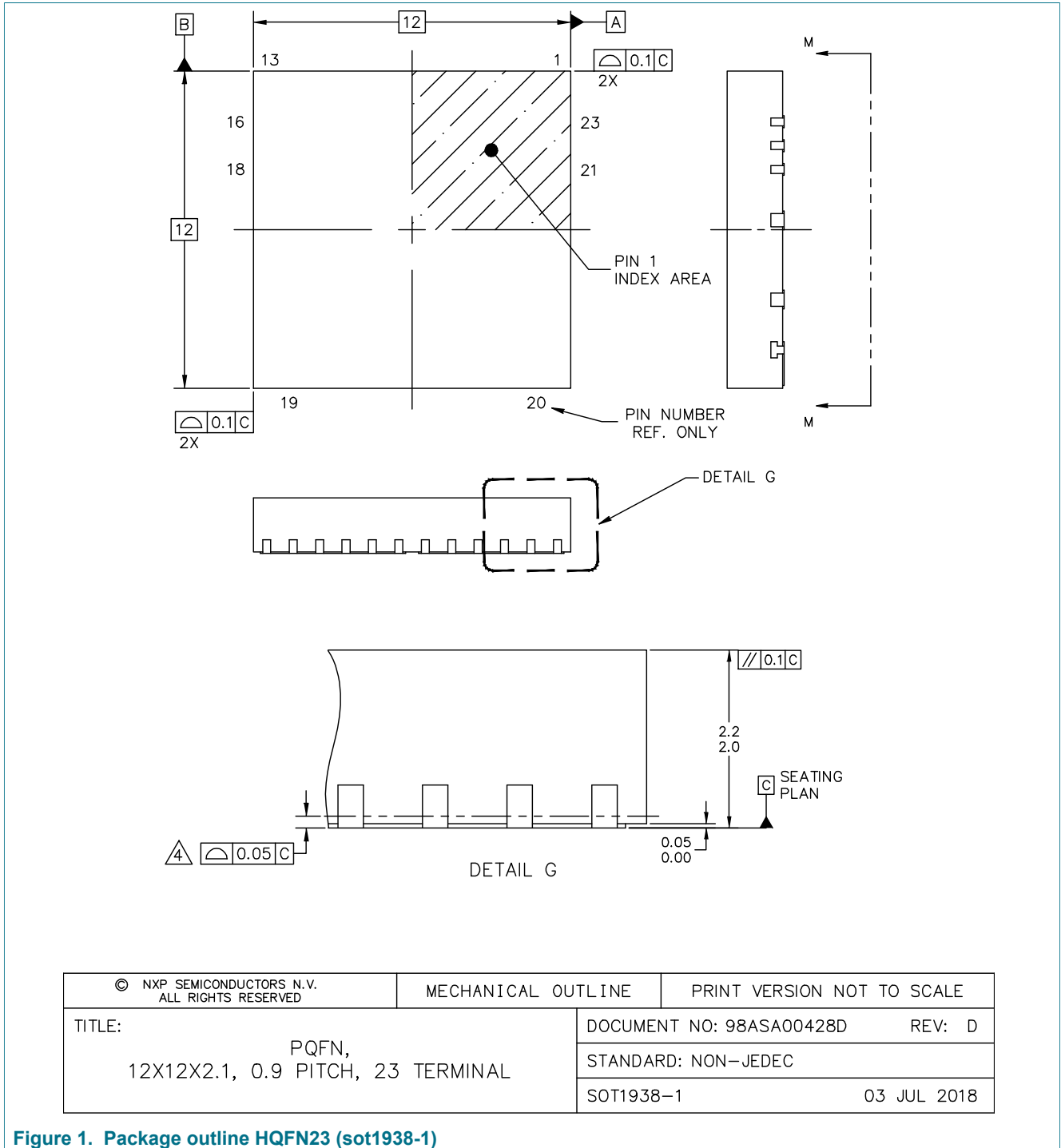


Figure 1. Package outline HQFN23 (sot1938-1)

HQFN23, thermal enhanced qual flat package, no leads, 23 terminals, 0.9 mm pitch, 12 mm x 12 mm x 2.1 mm body

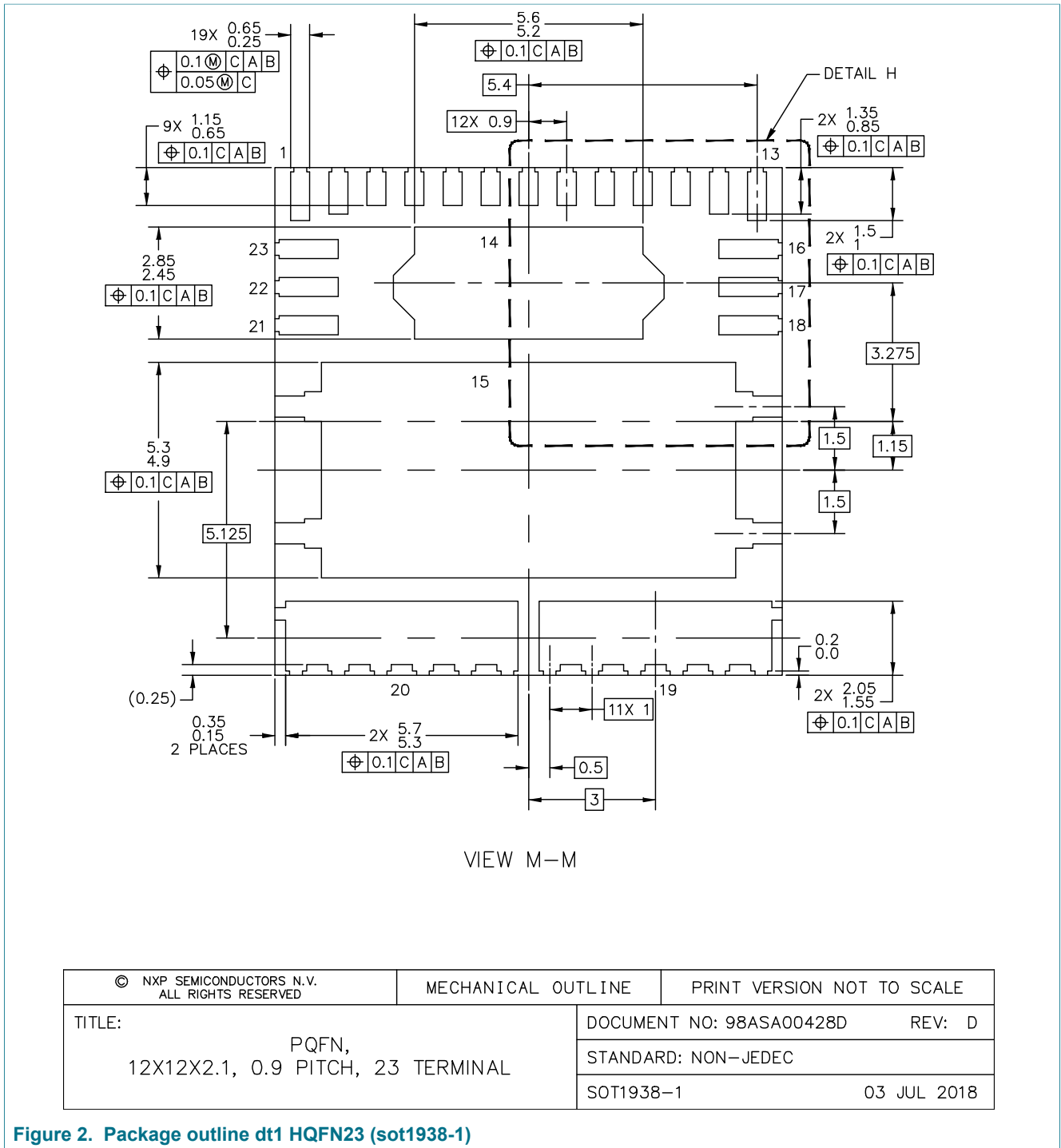
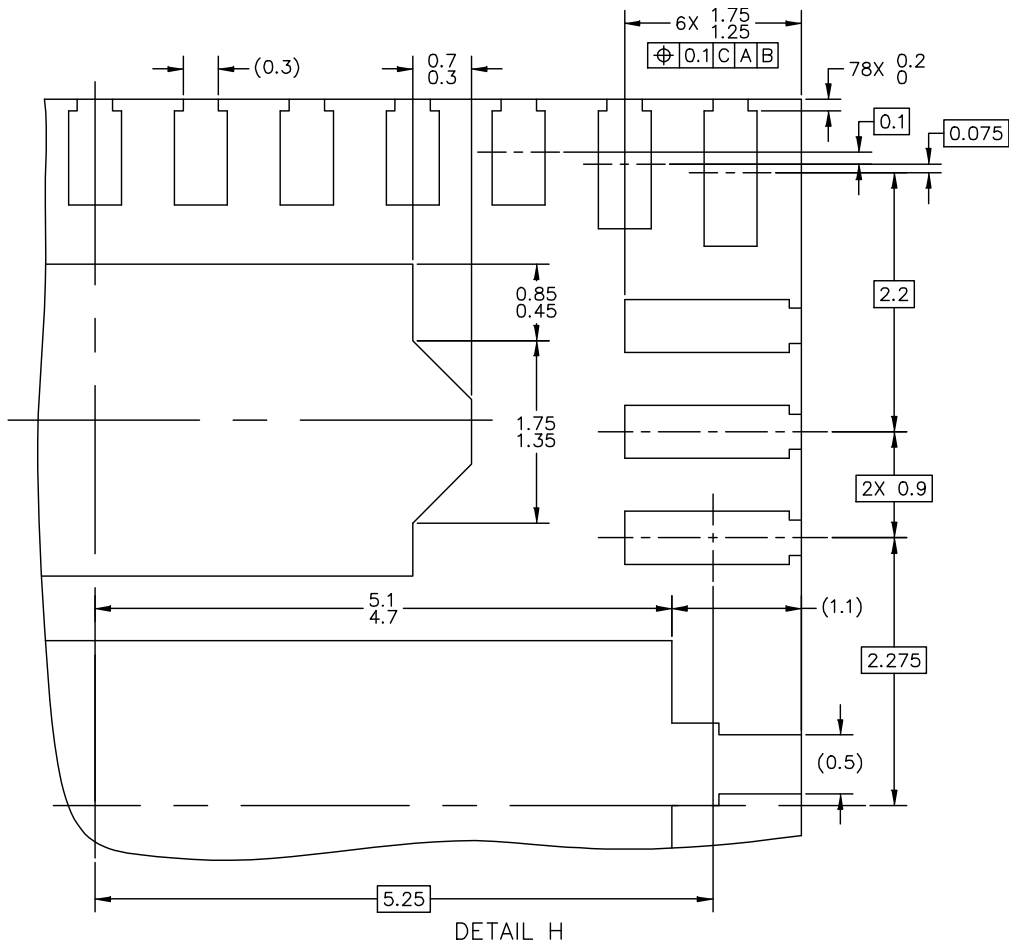


Figure 2. Package outline dt1 HQFN23 (sot1938-1)

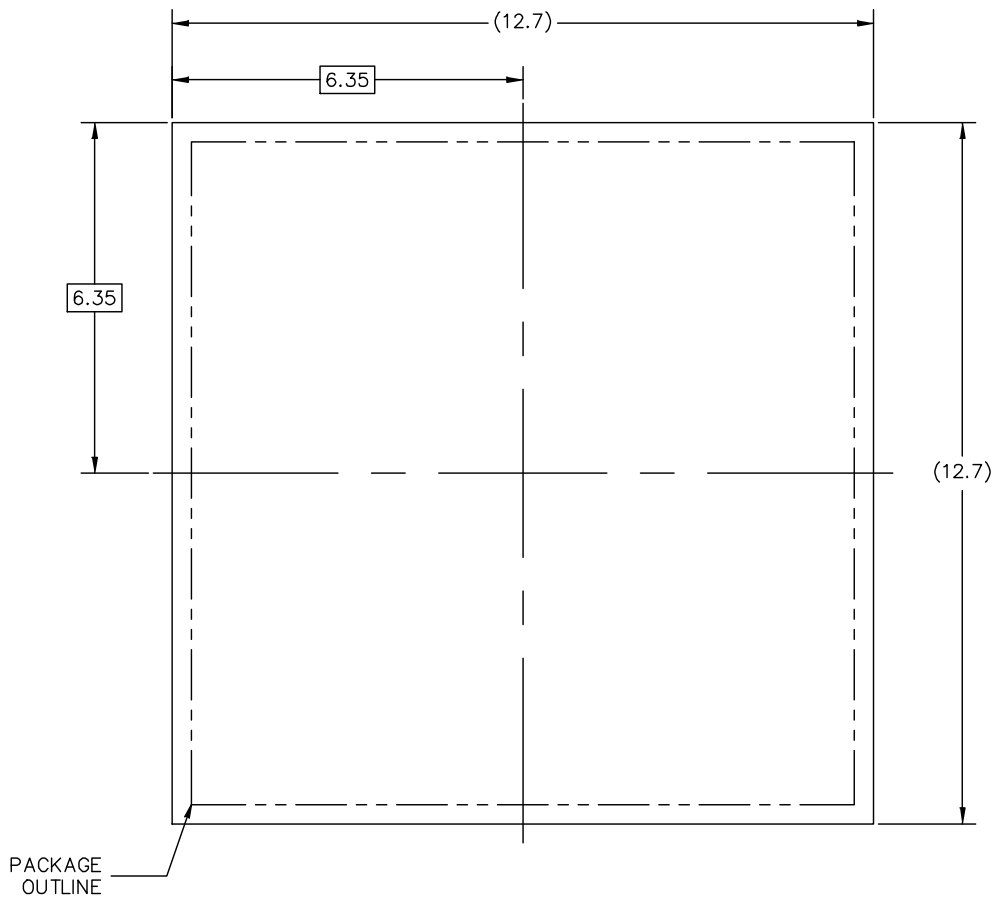
HQFN23, thermal enhanced qual flat package, no leads, 23 terminals, 0.9 mm pitch, 12 mm x 12 mm x 2.1 mm body



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TITLE: PQFN, 12X12X2.1, 0.9 PITCH, 23 TERMINAL		DOCUMENT NO: 98ASA00428D	REV: D
		STANDARD: NON-JEDEC	
		SOT1938-1	03 JUL 2018

Figure 3. Package outline dt2 HQFN23 (sot1938-1)

3 Soldering



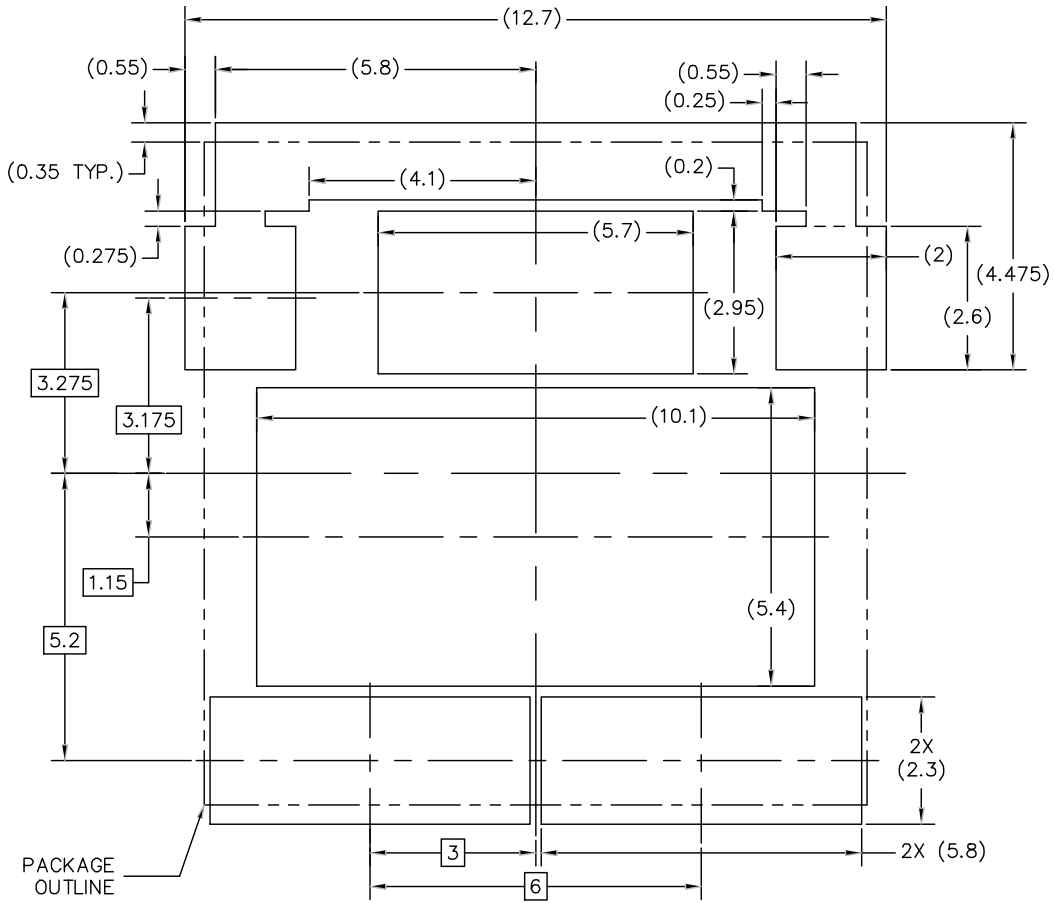
PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN 1

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Figure 4. Reflow soldering footprint part1 for HQFN23 (SOT1938-1)

HQFN23, thermal enhanced qual flat package, no leads, 23 terminals, 0.9 mm pitch, 12 mm x 12 mm x 2.1 mm body



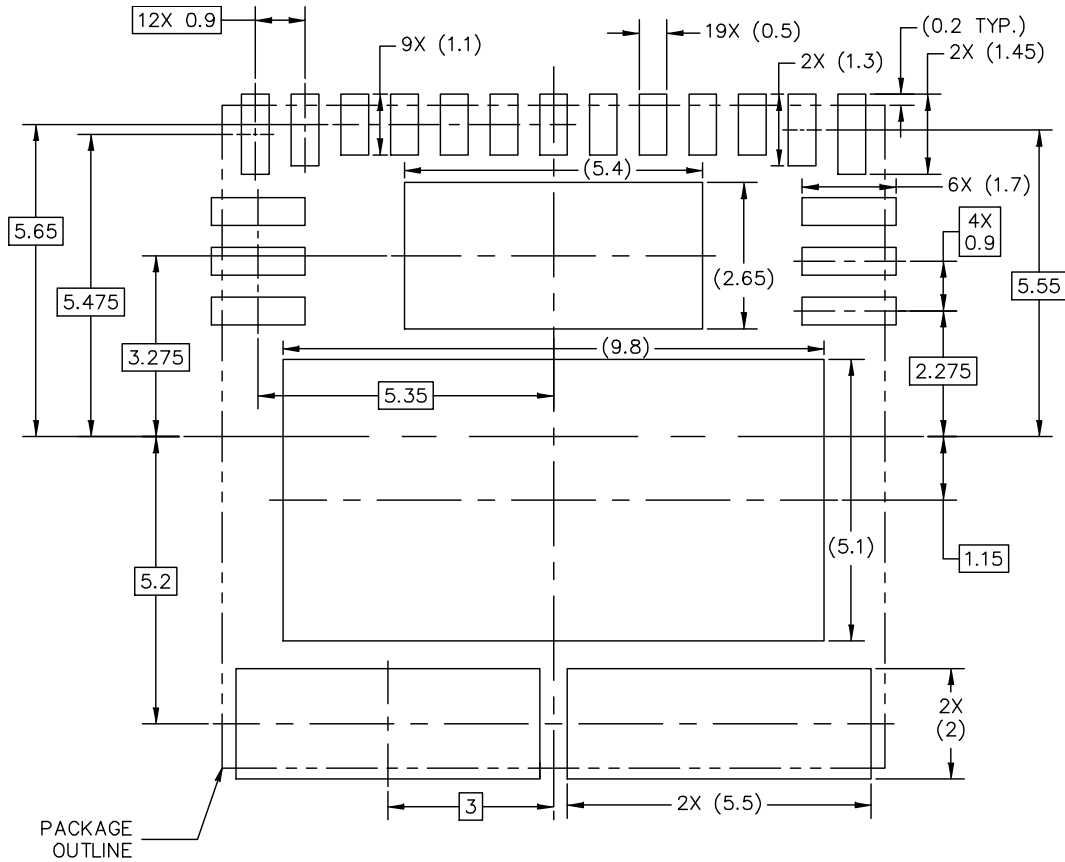
PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN 2

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Figure 5. Reflow soldering footprint part2 for HQFN23 (SOT1938-1)

HQFN23, thermal enhanced qual flat package, no leads, 23 terminals, 0.9 mm pitch, 12 mm x 12 mm x 2.1 mm body



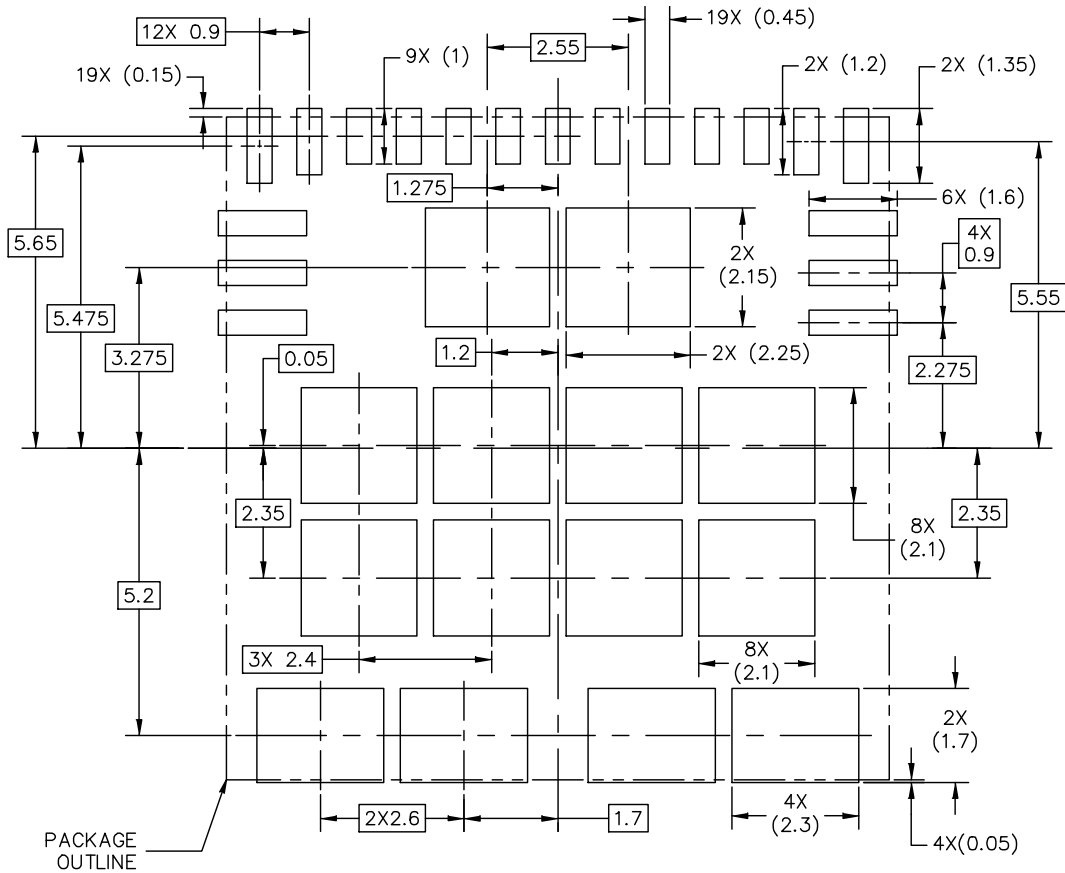
PCB CU GUIDELINES – I/O PADS & SOLDERABLE AREAS

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Figure 6. Reflow soldering footprint part3 for HQFN23 (SOT1938-1)

HQFN23, thermal enhanced qual flat package, no leads, 23 terminals, 0.9 mm pitch, 12 mm x 12 mm x 2.1 mm body



SOLDER PASTE STENCIL GUIDELINES


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Figure 7. Reflow soldering footprint part4 for HQFN23 (SOT1938-1)

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NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
3. THE COMPLETE JEDEC DESIGNATOR FOR THIS PACKAGE IS: HF-PQFP-N.
4.  COPLANARITY APPLIES TO LEADS AND CORNER LEADS.
5. MINIMUM METAL GAP IS GUARANTEED TO BE 0.25 MM.

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Figure 8. Package outline note HQFN23 (sot1938-1)

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