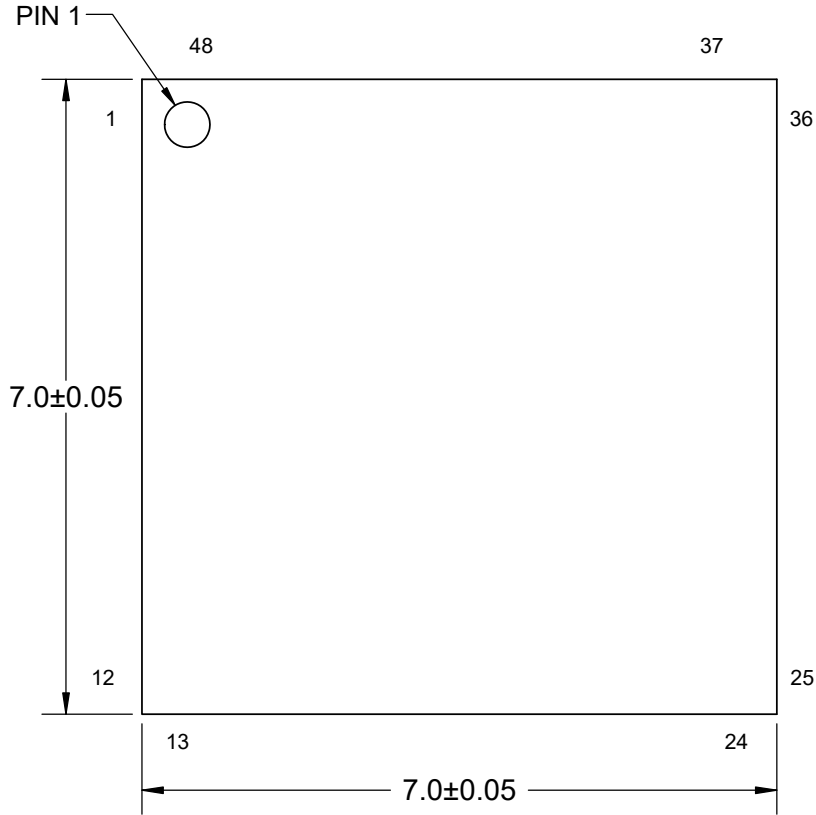
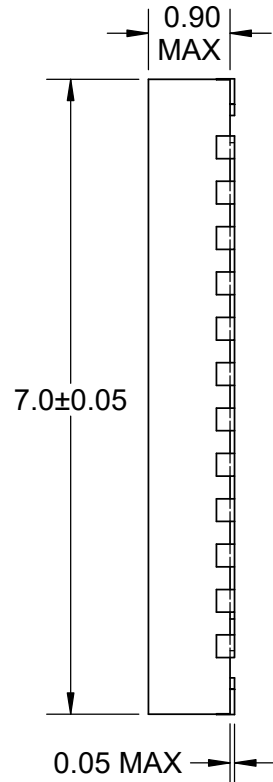


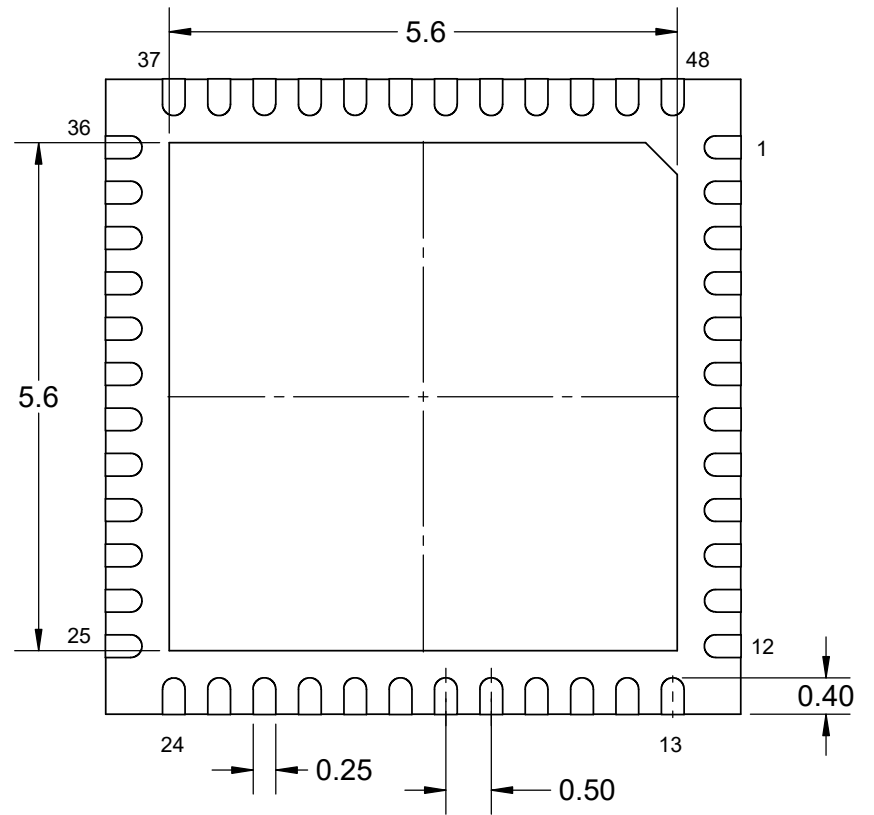
TOP VIEW



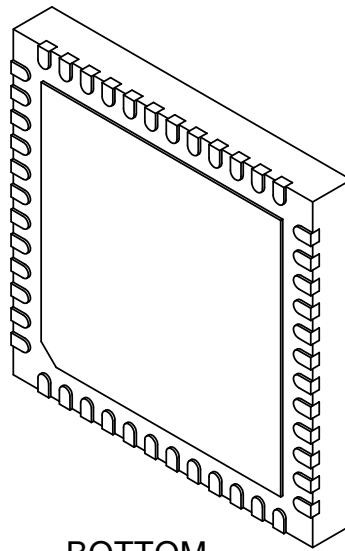
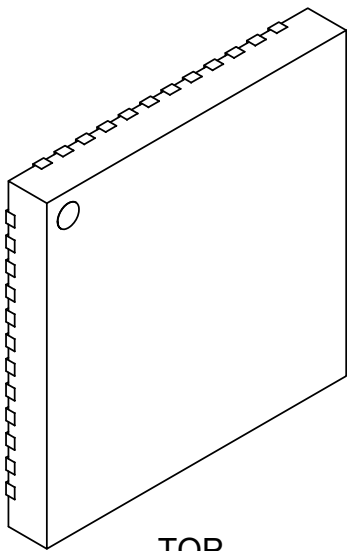
SIDE VIEW



BOTTOM VIEW



MODEL



Notes: (Unless Otherwise Specified).

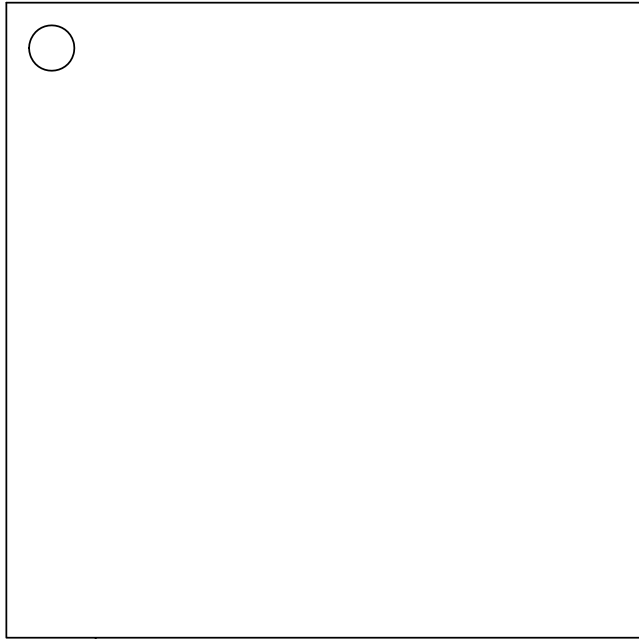
- 1) BODY: PLASTIC, SEMICONDUCTOR GRADE.
- 2) LEAD FRAME: COPPER, C-194 F/H.
- 3) LEAD FRAME PLATING: Ni Pd Au.
- 4) FRAME THICKNESS: 0.203mm.
- 5) DIE PAD: 5.6 x 5.6mm EXPOSED BOTTOM.
- 6) JEDEC OUTLINE: MO-220.
- 7) DIMENSIONS mm.

APPROVALS	DATE	TopLine®			
DRAWN					
ENG		TITLE 48-LEAD 7mm P0.5mm QFN ISOLATED			
MFG		SCALE	SIZE	DRAWING NO.	REV
QA		15:1	A	184848	A
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 5
REVISED					

ISOLATED PAD PATTERN

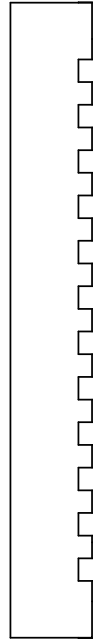
TOP VIEW

PIN 1

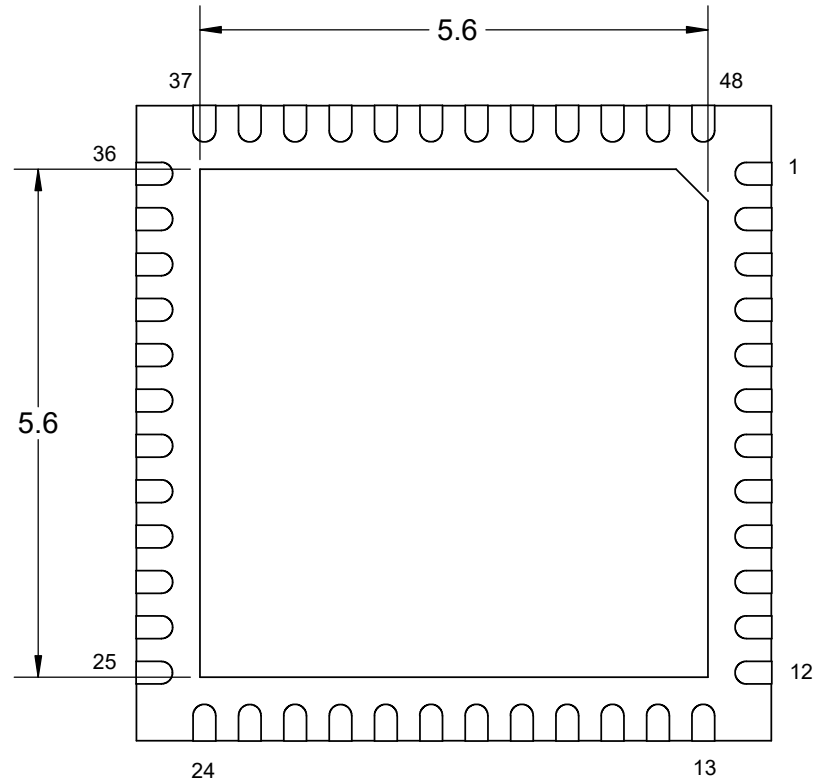


TOP SIDE ENCAPSULATION

SIDE VIEW



BOTTOM VIEW



NOTE:
1. PACKAGE PADS ARE INTERNALLY ISOLATED.

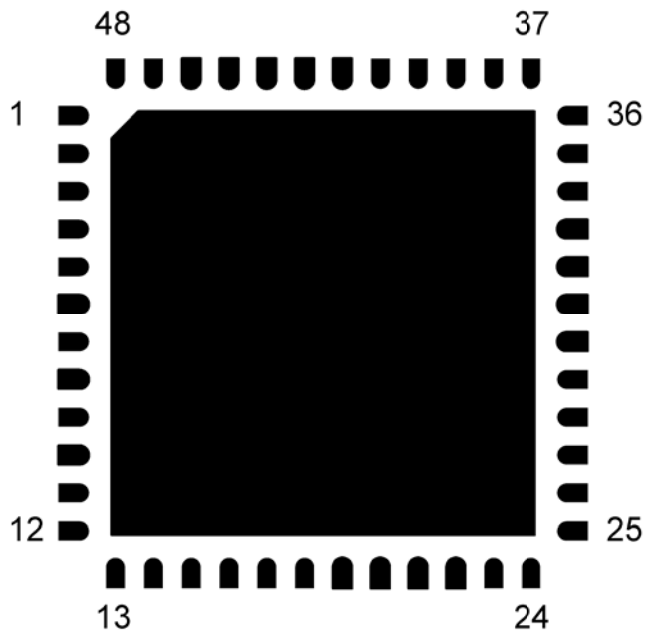
TopLine[®]

TITLE 48-LEAD 7mm P0.5mm
QFN ISOLATED

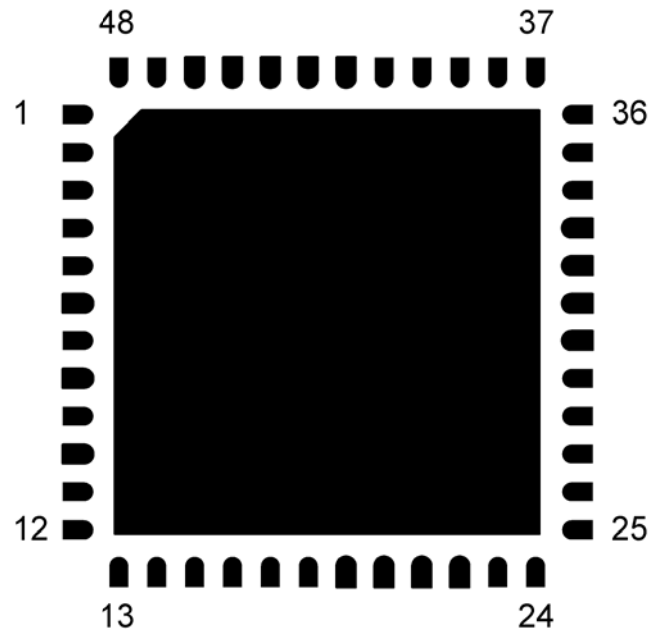
SCALE 16:1	SIZE A	DRAWING NO. 184848	REV A
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DO NOT SCALE DRAWING

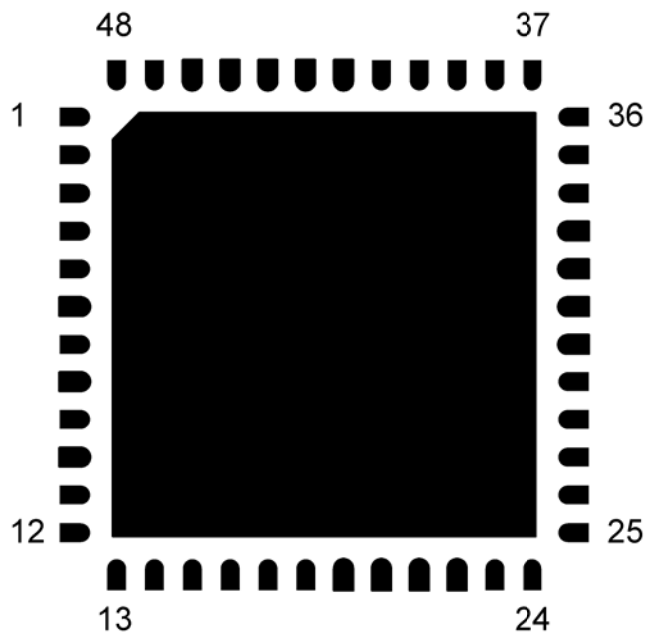
SHEET 2 OF 5



RECOMMENDED
PCB PADS




AFTER MOUNTING
ON PCB

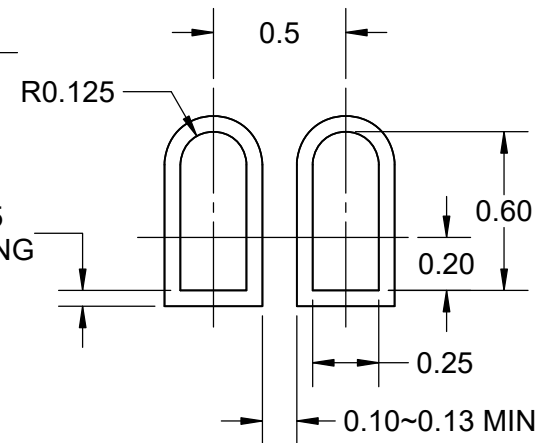
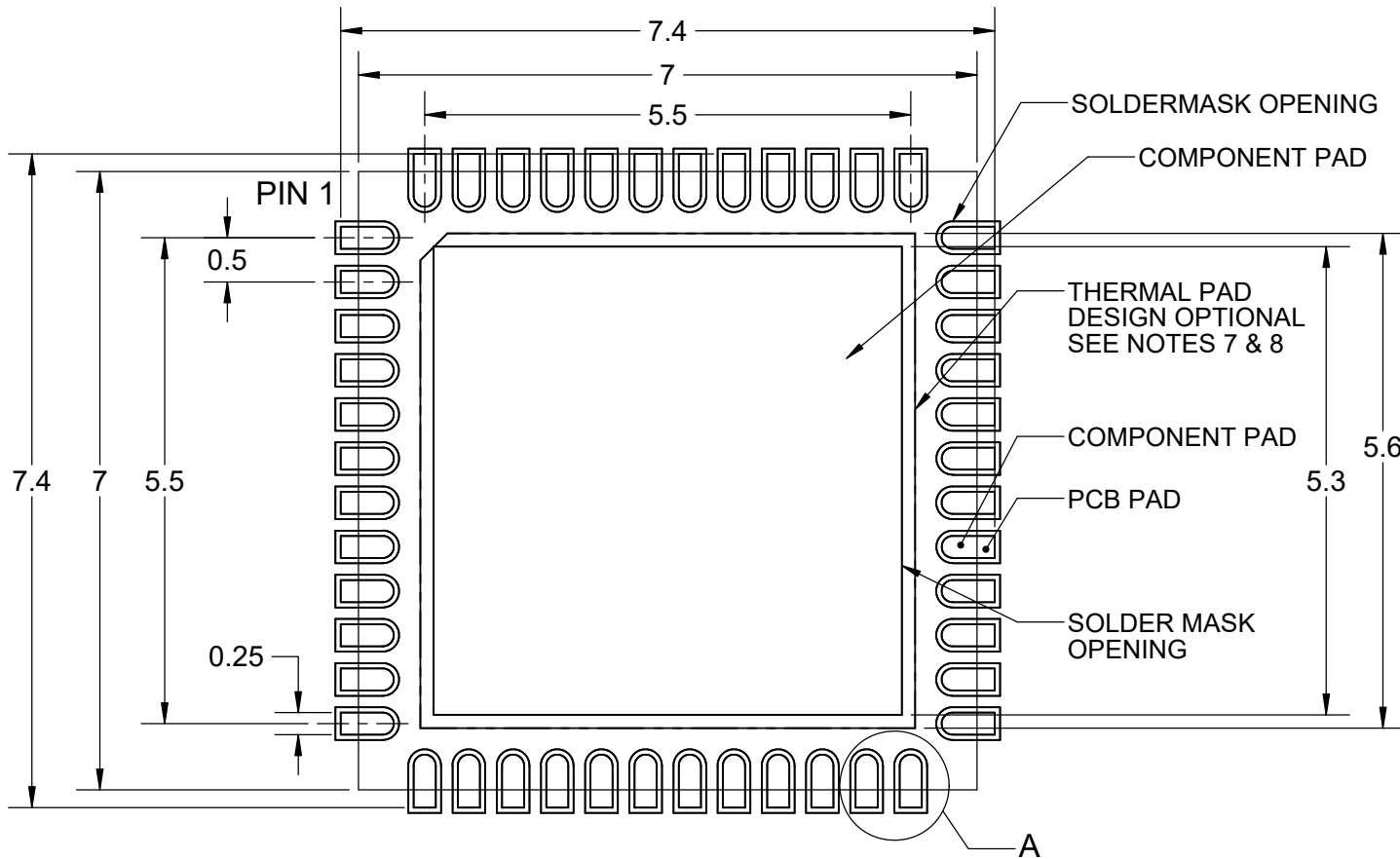


QFN

NET LIST			
PIN	PIN	PIN	PIN
1	13	25	37
2	14	26	38
3	15	27	39
4	16	28	40
5	17	29	41
6	18	30	42
7	19	31	43
8	20	32	44
9	21	33	45
10	22	34	46
11	23	35	47
12	24	36	48

			
TITLE 48-LEAD 7mm P0.5mm QFN ISOLATED			
SCALE 10:1	SIZE A	DRAWING NO. 184848	REV A
DO NOT SCALE DRAWING			SHEET 3 OF 5

**PC BOARD LAYOUT
DIMENSIONS IN MM
VIEW FROM TOP**



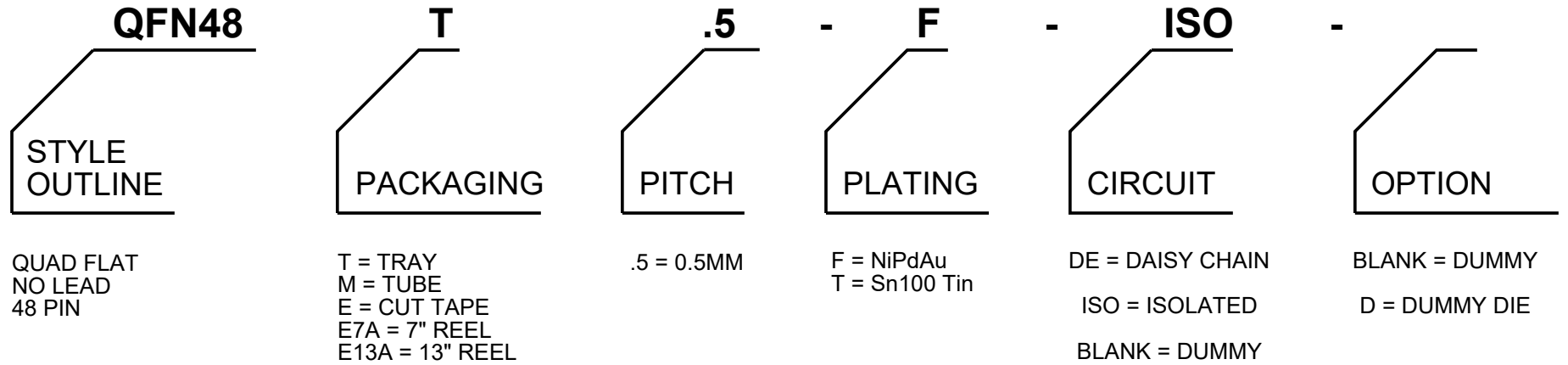
**DETAIL A
SCALE 35 : 1**

Notes: (Unless Otherwise Specified).

- 1) DIMENSIONS ARE PRESENTED ONLY AS A GUIDELINE. DESIGNERS SHOULD USE THEIR OWN KNOWLEDGE BASE WHEN DESIGNING THE PCB.
- 2) SURROUND EACH SIDE OF I/O PERIMETER PADS WITH 0.060~0.075 mm (NSMD) SOLDER MASK OPENING (2.4~3.0mils) OPTIONALLY OK TO USE RECTANGLE (NSMD) MASK OPENING AROUND I/O PADS.
- 3) ROUNDED PCB LAND PADS REDUCE SOLDER BRIDGING. PAD CHAMFER ANGLE MAY VARY.
- 4) PCB LANDS SHOULD BE 0.2mm LONGER THAN THE PACKAGE I/O PADS.
- 5) THE WIDTH OF PERIMETER PCB PADS SHOULD MATCH (1:1) THE WIDTH OF THE PACKAGE PADS.
- 6) REFER TO INDUSTRY REFERENCES SUCH AS IPC-SM-782 FOR PCB LAND PATTERN DESIGN.
- 7) THERMAL GROUND PADS MAY BE CHANGED TO SUITE REQUIREMENTS OF THE DESIGNER.
 - A) MAKE COPPER THERMAL PAD AS LARGE AS POSSIBLE.
 - B) DRILL MULTIPLE THERMAL VIAS 0.25~0.33mm DIAMETER USING 0.8~1.2mm PITCH GRID.
 - C) PLATE THERMAL VIA BARRELS WITH 1-OUNCE COPPER (18 μ m).
 - D) TENT (COVER) THERMAL VIAS WITH SOLDER MASK 0.1mm LARGER THAN THE VIA DIAMETER.
- 8) STENCIL DESIGN MAY BE CHANGED TO SUIT REQUIREMENTS OF THE DESIGNER.
 - A) LASER CUT STENCIL 0.125mm (5mil) THICK. APERTURE SIZE-TO-LAND RATIO OF 1:1.
 - B) THE SOLDER PASTE OPENING IN THE THERMAL PAD AREA SHOULD BE A MATRIX ARRAY OF SMALLER APERTURES INSTEAD OF ONE LARGE APERTURE TO CONTROL PASTE AMOUNTS.
 - C) APPLY 50% TO 80% SOLDER PASTE COVERAGE IN THE PAD AREA.

TopLine[®]			
TITLE		48-LEAD 7mm P0.5mm QFN ISOLATED	
SCALE	SIZE	DRAWING NO.	REV
18:1	A	184848	A
DO NOT SCALE DRAWING			SHEET 4 OF 5

PART NUMBERING SYSTEM



PART NUMBER	ISOLATED	PACKAGING	RoHS Pb-FREE	MSL LEVEL	DUMMY DIE
QFN48T.5-F-ISO	YES	JEDEC TRAY	YES	1	NO
QFN48M.5-F-ISO	YES	TUBE	YES	1	NO
QFN48E7A.5-F-ISO	YES	REEL	YES	1	NO

OTHER PART NUMBER COMBINATIONS AVAILABLE. CONTACT TOPLINE.

TopLine®			
TITLE		48-LEAD 7mm P0.5mm QFN ISOLATED	
SCALE	SIZE	DRAWING NO.	REV
NONE	A	184848	A
DO NOT SCALE DRAWING			SHEET 5 OF 5