



QFNTray JEDEC Matrix IC Trays

QFN IC Matrix Trays Conform to JEDEC Standards



QFN Body Size	Quantity Pockets Per Tray	Matrix Row-Column	Reference	Order TopLine Part Number
QFN Tray				
3 x 3mm	490	14 x 35	Standard	QFNTRAY3mm-14x35
3 x 3mm	624	16 x 39	High-Capacity	QFNTRAY3mm-16x39
4 x 4mm	490	14 x 35	Standard	QFNTRAY4mm-14x35
5 x 5mm	490	14 x 35	Standard	QFNTRAY5mm-14x35
5 x 5mm	576	16 x 36	High-Capacity	QFNTRAY5mm-16x36
6 x 6mm	490	14 x 35	Standard	QFNTRAY6mm-14x35
7 x 7mm	260	10 x 26	Standard	QFNTRAY7mm-10x26
7 x 7mm	416	13 x 32	High Capacity	QFNTRAY7mm-13x32
8 x 8mm	260	10 x 26	Standard	QFNTRAY8mm-10x26
9 x 9mm	260	10 x 26	Standard	QFNTRAY9mm-10x26
10 x 10mm	168	8 x 21	Standard	QFNTRAY10mm-8x21

Optional Features:

Specify max temperature: 125°C, 140°C, 150°C, 180°C when ordering.
Tray color Black.

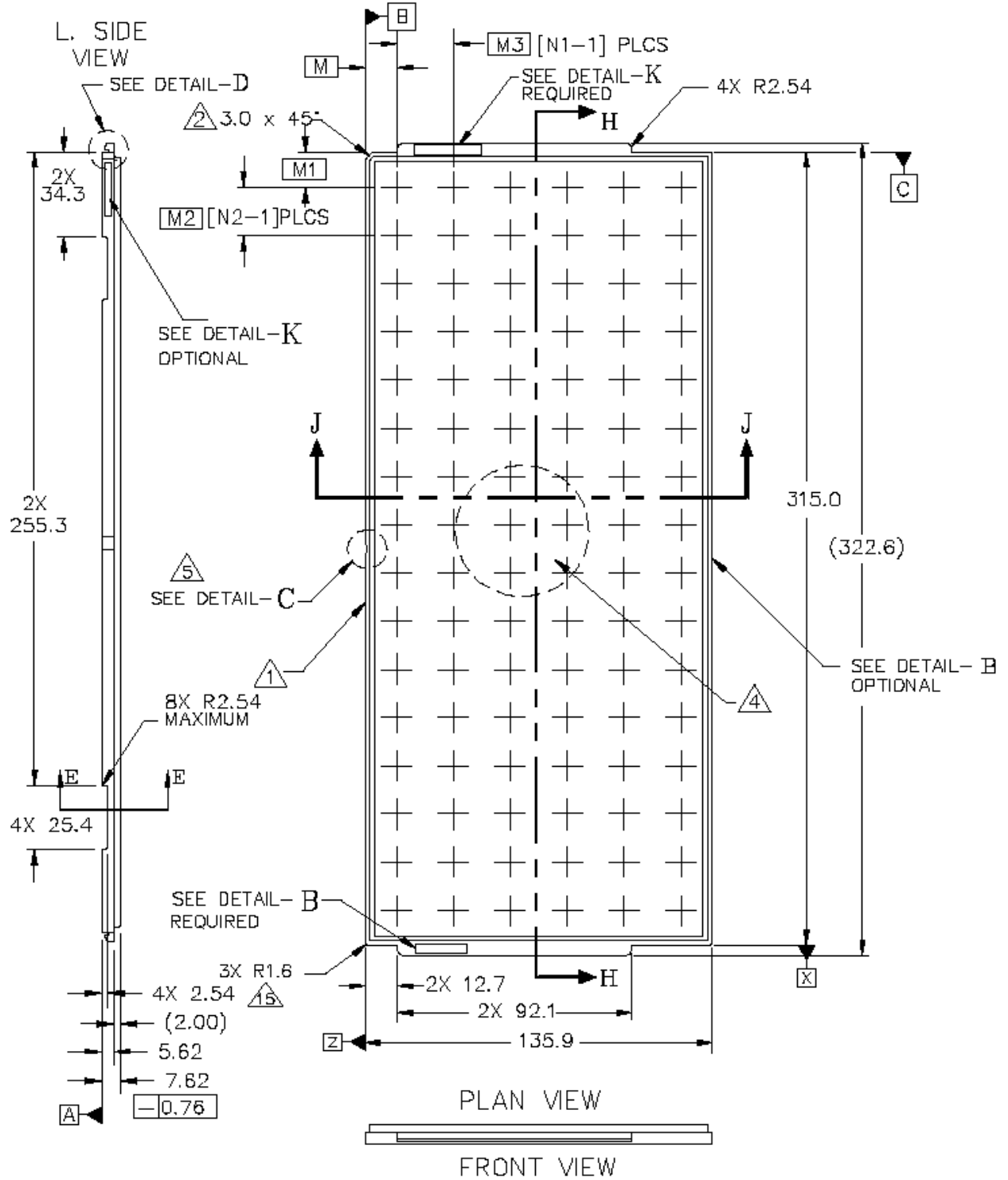
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95 Highway 22 W
Milledgeville, GA 31061, USA
Toll Free USA/Canada (800) 776-9888
International: 1-478-451-5000 • Fax: 1-478-451-3000
Email: sales@topline.tv



QFN

Bumpered Type	JEDEC		Size	columns N1	Rows N2	Cells N3	From Corner (+X) M	From Corner (-Y) M1	-Y step M2	+X Step M3
	Standard	Var	Lead Count BQFP - PQFP							
QFN	CO-034	AA	3x3mm ~ 6x6mm	14	35	490	8.15	7.90	8.80	9.20
QFN	CO-034	AB	7x7mm ~ 9x9mm	10	26	260	10.35	10.00	11.80	12.80
QFN	CO-034	AC	10x10mm ~ 12x12mm	8	21	168	11.95	11.00	14.65	16.00
BGA	CO-029	AZ	12mm x 12mm	9	21	189	9.55	10.00	14.75	14.60

Typical JEDEC Outline



XXXX (N4)

13

XXX°C MAX.

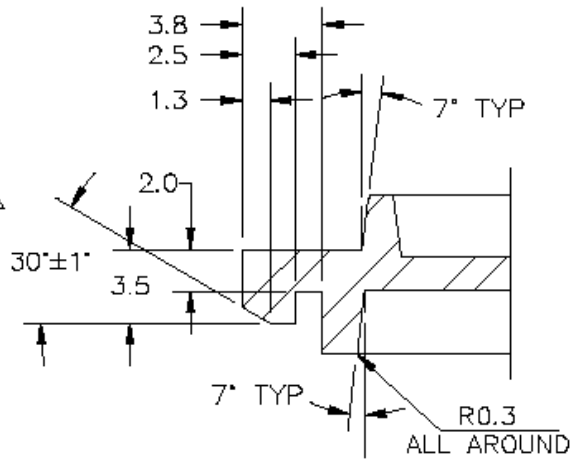
12

TRAY DESIGNATOR

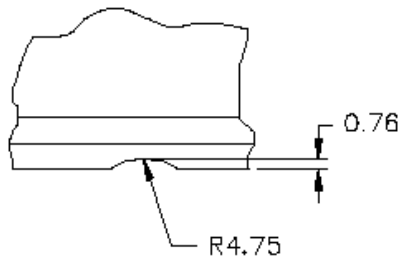
TEMP. RATING

DETAIL~ K

DETAIL~ B

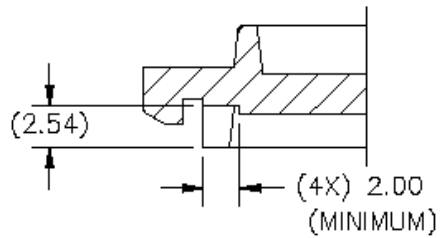


DETAIL~ D

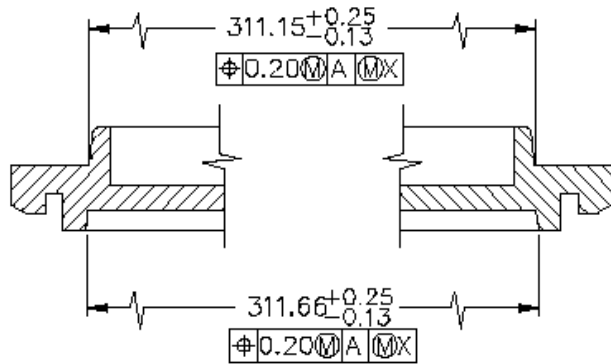


DETAIL~ C

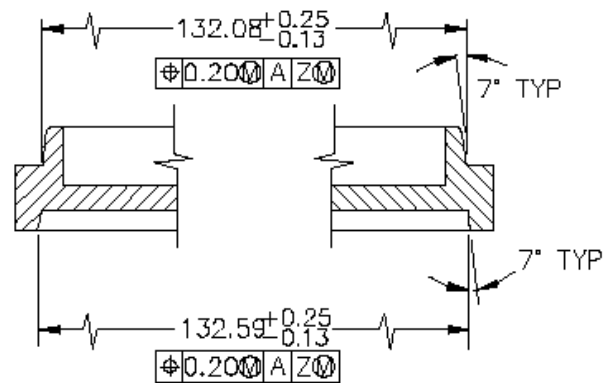
NOTE: SCALLOP IS CENTERED ON SIDE OF TRAY.



SECTION~ E-E
ROTATED 90° CCW



SECTION~ H-H
ROTATED 90° CCW



SECTION~ J-J

TRAY STACKING DETAIL

NOTES:

- ① THESE SURFACES TO BE FREE OF SEAMS.
- ② CHAMFER DENOTES PACKAGE PIN 1 ORIENTATION.
- 3 TRAY VACUUM PICKUP METHOD ALLOWS TWO SEPARATE PICKUP AREAS, RESULTING IN TWO CLOSED CELLS PER TRAY. OPTIONAL VACUUM PICKUP CELL LOCATIONS ARE N5.
- ④ TRAY VACUUM PICKUP METHOD REQUIRES A 28mm SQUARE (MINIMUM) WALLED PICKUP AREA, LOCATED AS CLOSE TO THE CENTER OF THE TRAY AS IS PRACTICAL. CENTER VACUUM PICKUP CELL LOCATIONS ARE N6.
- ⑤ THE SCALLOP ALLOWS THE USE OF A PIN TO MECHANICALLY BIAS THE TRAY ORIENTATION.
- 6 ALL TRAY MEASUREMENTS ARE TO BE MADE WITH THE TRAY UN-RESTRICTED.
- 7 TOTAL USABLE CELLS N3 = N1 x N2
- 8 PACKAGE INTERFACE CONTROLLED BY PACKAGE DESIGN AND LEAD FORM.
- 9 NON-TABULATED DIMENSIONS HAVE A TOLERANCE OF .X=±0.25 .XX=±0.13, ANGLES ±0.5°
- 10 ALL DIMENSIONS ARE IN MILLIMETERS.
- 11 INTERPRET DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5M-1994.
- ⑫ XXX IS THE MAXIMUM OPERATING TEMPERATURE THE EMPTY TRAY CAN BE SUBJECTED TO FOR 48 CONTINUOUS HOURS WITHOUT VIOLATING THE DIMENSIONAL TOLERANCE OF THE TRAY.
- ⑬ N4 INDICATES PACKAGE TYPE ACCOMMODATED.
- 14 DIMENSIONS M, M1, M2, AND M3 DEFINE THE CENTER LINES FOR THE CELL SITES.
- ⑮ BOTTOM SIDEWALL NOTCHES REQUIRE A 2.00mm (MINIMUM) DEPTH TO FACILITATE AUTO HANDLING EQUIPMENT.
- 16 ALL EXTERNAL TRAY SURFACES WHICH MAY COME IN CONTACT WITH THE DRY PACK BAGS SHALL BE FREE OF SHARP EDGES.
- *17 RECOMMENDED FOR PACKAGES WITH OVERALL THICKNESS OF 1.20mm OR LESS. MAY ACCOMMODATE UP TO A MAXIMUM THICKNESS OF 4.02mm.
- 18 ALL VARIATIONS COMPLY WITH DESIGN GUIDE, PUB 95, SECTION 4.9, REVISION A.