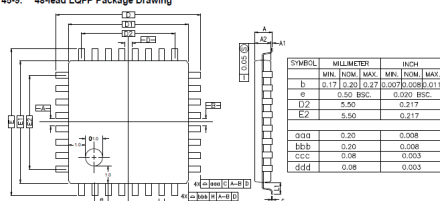


45.7 48-lead LQFP Mechanical Characteristics

Figure 45-9. 48-lead LQFP Package Drawing



CONTROL DIMENSIONS ARE IN MILLIMETERS.

SYMBOL	MILLIMETER			INCH		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	—	1.60	—	—	0.063	—
A1	0.05	—	0.15	0.002	—	0.006
A2	1.35	1.40	1.45	0.053	0.055	0.057
D	9.00	BSC.	—	0.354	BSC.	—
D1	7.00	BSC.	—	0.276	BSC.	—
E	9.00	BSC.	—	0.354	BSC.	—
E1	7.00	BSC.	—	0.276	BSC.	—
F2	0.08	—	0.20	0.003	—	0.008
F1	0.08	—	—	0.003	—	—
θ	6°	3.5°	7°	6°	3.5°	7°
θ1	6°	—	—	6°	—	—
θ2	11°	12°	13°	11°	12°	13°
θ3	11°	12°	13°	11°	12°	13°
c	0.09	—	0.20	0.004	—	0.008
L	0.45	0.60	0.75	0.018	0.024	0.030
L1	1.00	REF	—	0.039	REF	—
S	0.20	—	—	0.008	—	—

NOTES:

1. DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSION. ALLOWABLE PROTRUSION IS 0.25mm FOR SIZE G1 AND E1 ARE MAXIMUM PLASTIC BODY SIZE DIMENSIONS INCLUDING MOLD PROTRUSION.
2. DIMENSION S DOES NOT INCLUDE DAMPING PROTRUSION. ALLOWABLE DAMPING PROTRUSION SHALL NOT CAUSE THE LEAD HEET TO EXCEED THE MAXIMUM S DIMENSION BY MORE THAN 0.05mm.
3. DIMENSION G1 CAN NOT BE LOCATED ON THE LOWER RADIUS OF THE FOOT. MINIMUM SPACING BETWEEN PROTRUSION AND AN ADJACENT LEAD IS 0.50mm FOR 0.4mm and 0.5mm PITCH PACKAGES.

ALL DIMENSIONS OF ALL PINS BASED ON INSIDE OF AIR SPACE THEY ARE NOT MENTIONED IN JEDEC SPEC NOT-006.

Table 45-25. Device and 48-lead LQFP Package Maximum Weight