



CONTROL DIMENSIONS ARE IN MM.

SYMBOL	MILLIMETER		
	MIN.	NOM.	MAX.
A	—	—	4.10
A1	0.25	—	0.50
A2	3.20	3.40	3.60
D	31.20 BASIC		
D1	28.00 BASIC		
E	31.20 BASIC		
E1	28.00 BASIC		
R2	0.13	—	0.30
R1	0.13	—	—
θ	0°	—	7°
θ_1	0°	—	—
θ_2	8° REF		
θ_3	8° REF		
c	0.11	0.15	0.23
L	0.73	0.88	1.03
L ₁	1.60 REF		
S	0.20	—	—
b	0.22	0.30	0.40
e	0.65 BSC.		
D2	25.35		
E2	25.35		

NOTE:

1. Controlling dimensions in millimeters
2. Ref: JEDEC MS-022B/DD-1
3. Package outline exclusive of Mold Flash and Metal Burr

	DATE: 11/23/10
	DESCRIPTION: 160-contact, Metric Quad Flat Package (MQFP)
	PACKAGE CODE: MA
DOCUMENT CONTROL #: PD-2019	REVISION: C