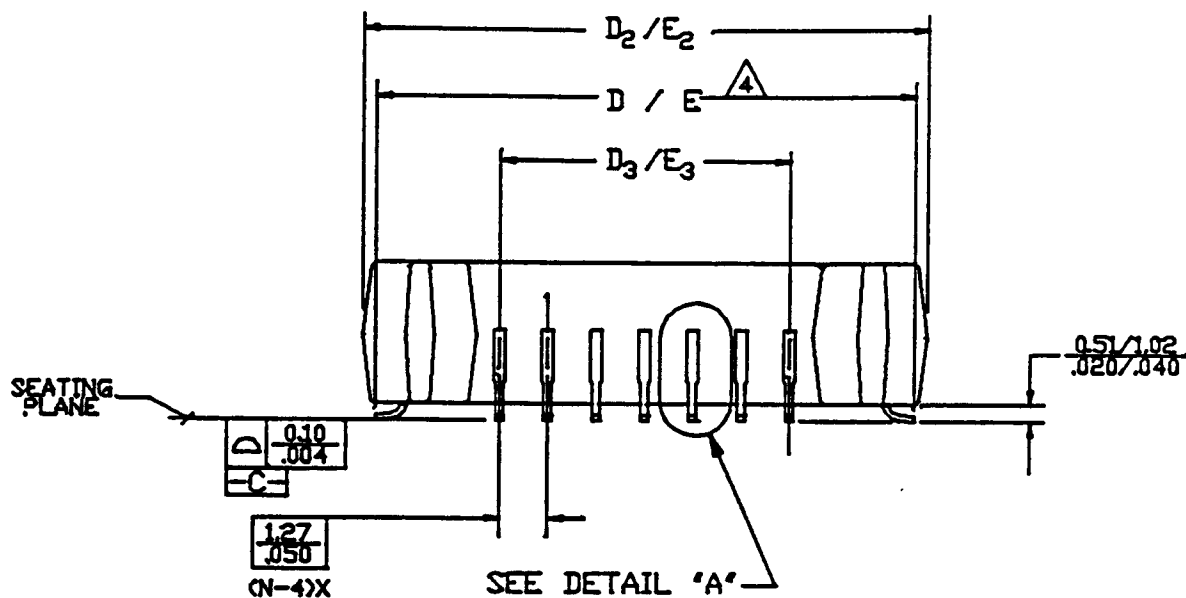


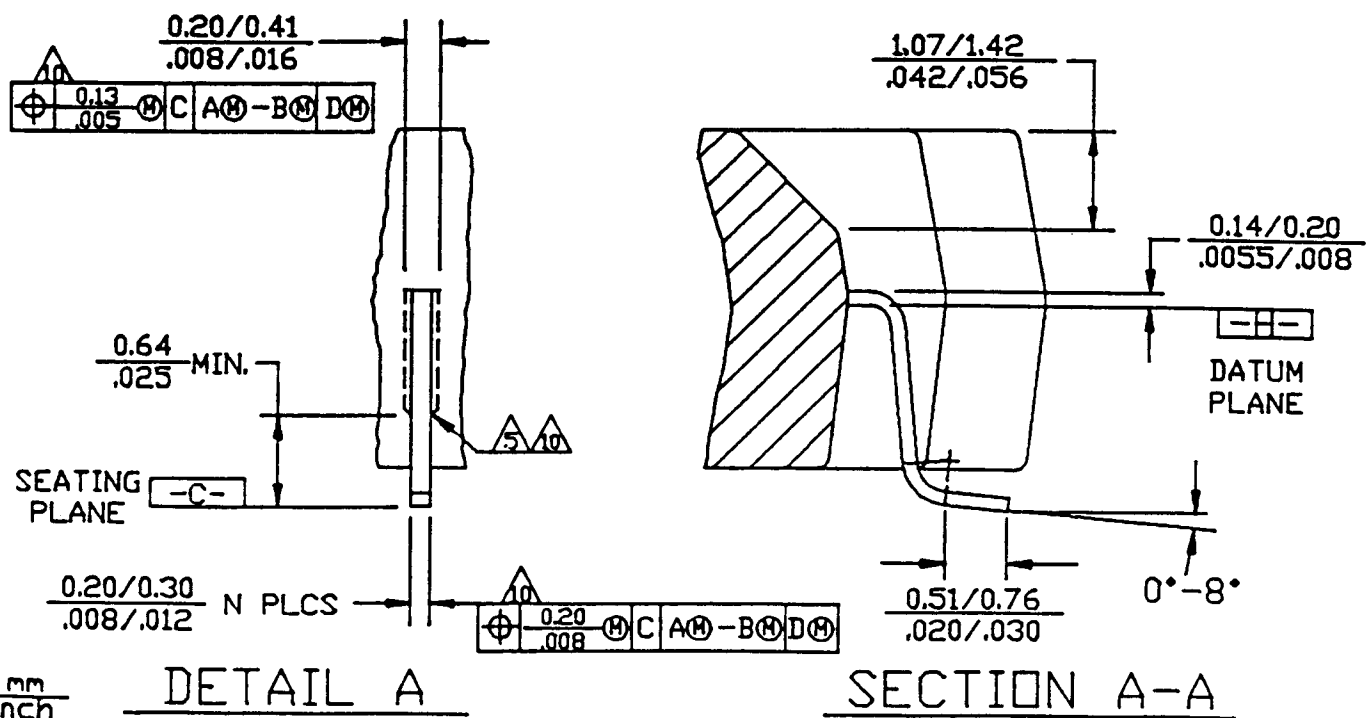
0.01
inch

FIGURE 1 PRINCIPAL DIMENSIONS & DATUMS



$\frac{\text{mm}}{\text{inch}}$

FIGURE 3 TERMINAL DETAILS



$\frac{\text{mm}}{\text{inch}}$

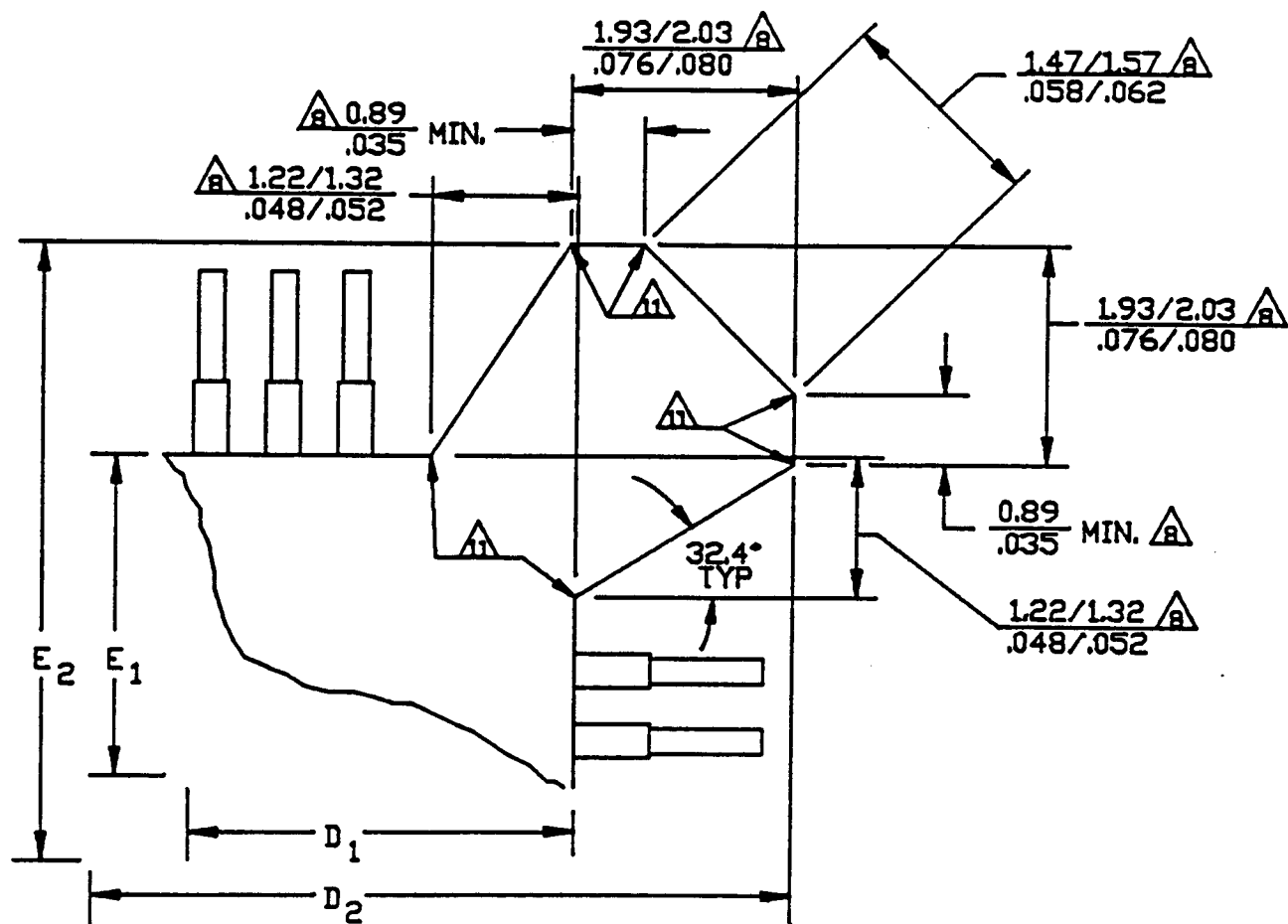
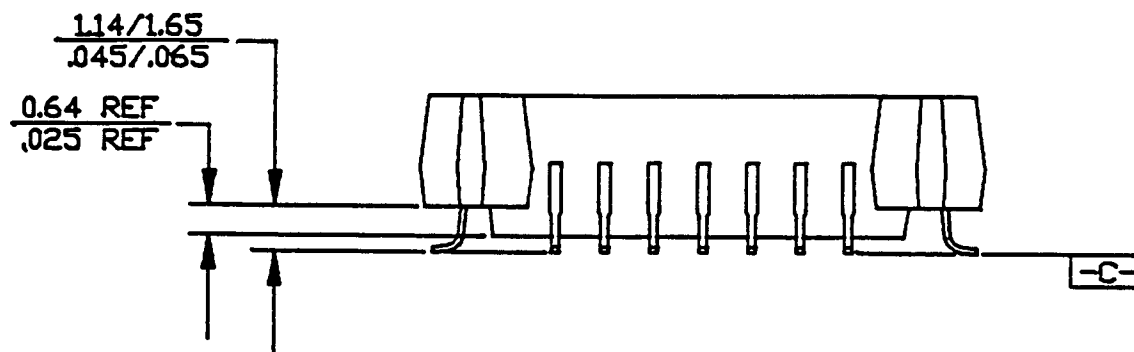
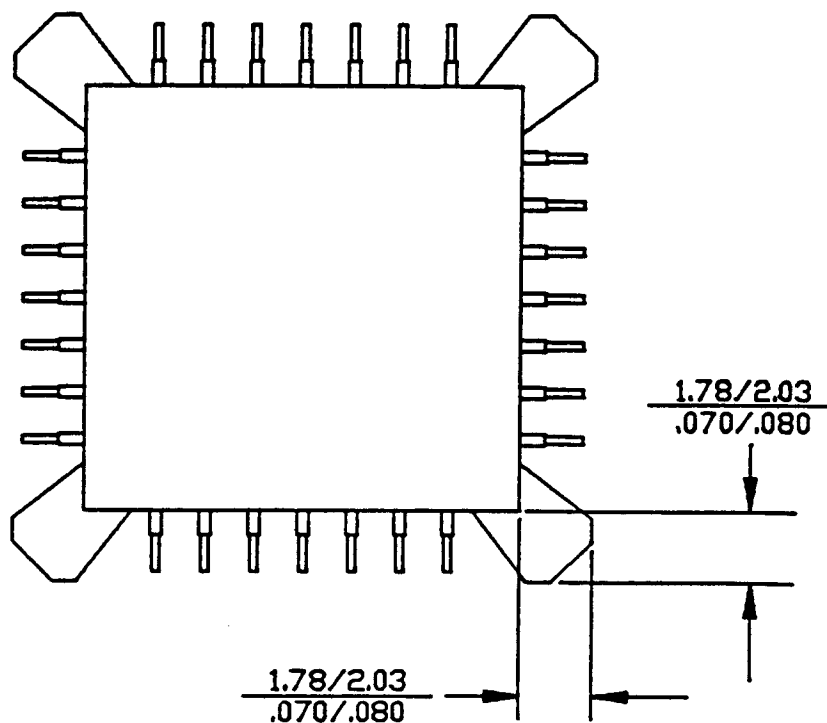


FIGURE 4 (TYP ALL CORNERS)

$\frac{mm}{inch}$



SIDE VIEW



BOTTOM VIEW

$\frac{\text{mm}}{\text{Inch}}$

FIGURE 5 RECESSED BUMPER

NOTE: RECESSED BUMPER FEATURE IS OPTIONAL

JEDEC
SOLID STATE PRODUCT
OUTLINES

TITLE: PLASTIC QUAD FLAT PACK
.050" LEAD SPACING (GULLWING)

DATE:
11/88

Issue A

MO-089

SYMBOL	VARIATIONS ALL DIMENSIONS IN INCHES											
	AA		NOTE	AB		NOTE	AC		NOTE	AD		NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
D	.575	.585	4	.775	.785	4	.875	.885	4	1.075	1.085	4
D ₁	.447	.453	8	.647	.653	8	.747	.753	8	.947	.953	8
D ₂	.597	.603	8	.797	.803	8	.897	.903	8	1.097	1.103	8
D ₃	.300 REF			.500 REF			.600 REF			.800 REF		
E	.575	.585	4	.775	.785	4	.875	.885	4	1.075	1.085	4
E ₁	.447	.453	8	.647	.653	8	.747	.753	8	.947	.953	8
E ₂	.597	.603	8	.797	.803	8	.897	.903	8	1.097	1.103	8
E ₃	.300 REF			.500 REF			.600 REF			.800 REF		
N	28			44			52			68		

SYMBOL	VARIATIONS ALL DIMENSIONS IN MILLIMETERS											
	AA		NOTE	AB		NOTE	AC		NOTE	AD		NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
D	14.61	14.86	4	19.69	19.94	4	22.23	22.48	4	27.31	27.56	4
D ₁	11.36	11.50	8	16.44	16.58	8	18.98	19.12	8	24.06	24.20	8
D ₂	15.17	15.31	8	20.25	20.39	8	22.79	22.93	8	27.87	28.01	8
D ₃	7.62 REF			12.70 REF			15.24 REF			20.32 REF		
E	14.61	14.86	4	19.69	19.94	4	22.23	22.48	4	27.31	27.56	4
E ₁	11.36	11.50	8	16.44	16.58	8	18.98	19.12	8	24.06	24.20	8
E ₂	15.17	15.31	8	20.25	20.39	8	22.79	22.93	8	27.87	28.01	8
E ₃	7.62 REF			12.70 REF			15.24 REF			20.32 REF		
N	28			44			52			68		

JEDEC SOLID STATE PRODUCT OUTLINES	TITLE: PLASTIC QUAD FLAT PACK .050" LEAD SPACING (GULLWING)	DATE: 11/88	Issue A	MO-089
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SYMBOL	VARIATIONS ALL DIMENSIONS IN INCHES		
	AE		NOTE
	MIN.	MAX.	
D	1.275	1.285	4
D ₁	1.147	1.153	8
D ₂	1.297	1.303	8
D ₃	1.000	REF	
E	1.275	1.285	4
E ₁	1.147	1.153	8
E ₂	1.297	1.303	8
E ₃	1.000	REF	
N	84		

SYMBOL	VARIATIONS ALL DIMENSIONS IN MILLIMETERS		
	AE		NOTE
	MIN.	MAX.	
D	32.39	32.64	4
D ₁	29.14	29.28	8
D ₂	32.95	33.09	8
D ₃	25.40	REF	
E	32.39	32.64	4
E ₁	29.14	29.28	8
E ₂	32.95	33.09	8
E ₃	25.40	REF	
N	84		

JEDEC SOLID STATE PRODUCT OUTLINES	TITLE: PLASTIC QUAD FLAT PACK .050" LEAD SPACING (GULLWING)	DATE: 11/88	Issue A	MO-089
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NOTES:

- 1 ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5-1982
- 2 DATUM PLANE -H- LOCATED AT MOLD PARTING LINE AND COINCIDENT WITH LEAD, WHERE LEAD EXITS PLASTIC BODY AT BOTTOM OF PARTING LINE.
- 3 DATUMS A-B AND -D- TO BE DETERMINED WHERE CENTER LEADS EXIT PLASTIC BODY AT DATUM PLANE -H-
- 4 TO BE DETERMINED AT SEATING PLANE -C-
- 5 DETAIL OF TRANSITION IS OPTIONAL.
- 6 DIMENSIONS D_1 AND E_1 DO NOT INCLUDE MOLD PROTRUSION. ALLOWABLE MOLD PROTRUSION IS .010"/0.254mm ON D_1 AND E_1 DIMENSIONS, AND .007"/0.178mm ON D_2 AND E_2 DIMENSIONS.
- 7 DETAILS OF PIN 1 IDENTIFIER ARE OPTIONAL BUT MUST BE LOCATED WITHIN ONE OF THE TWO ZONES INDICATED.
- 8 THESE DIMENSIONS TO BE DETERMINED AT DATUM PLANE -H-
- 9 CONTROLLING DIMENSION: INCH.
- 10 LEAD SHOULDER WIDTH WIDER THAN LOWER LEAD WIDTH IS AN OPTIONAL WIDTH.
- 11 THIS FEATURE MAY BE A CHAMFER OR RADIUS.
- 12 THIS OUTLINE IS FOOTPRINT COMPATABLE WITH THE .050 INCH CQFP OUTLINE WHICH IS MO-084. ALL BODY DIMENSIONS AND SOME FOOTPRINT DIMENSIONS ARE IN COMMON WITH THE .025 INCH PQFP MO-069. SOME FOOTPRINT DIMENSIONS ARE IN COMMON WITH .025 INCH CQFP MO-082.