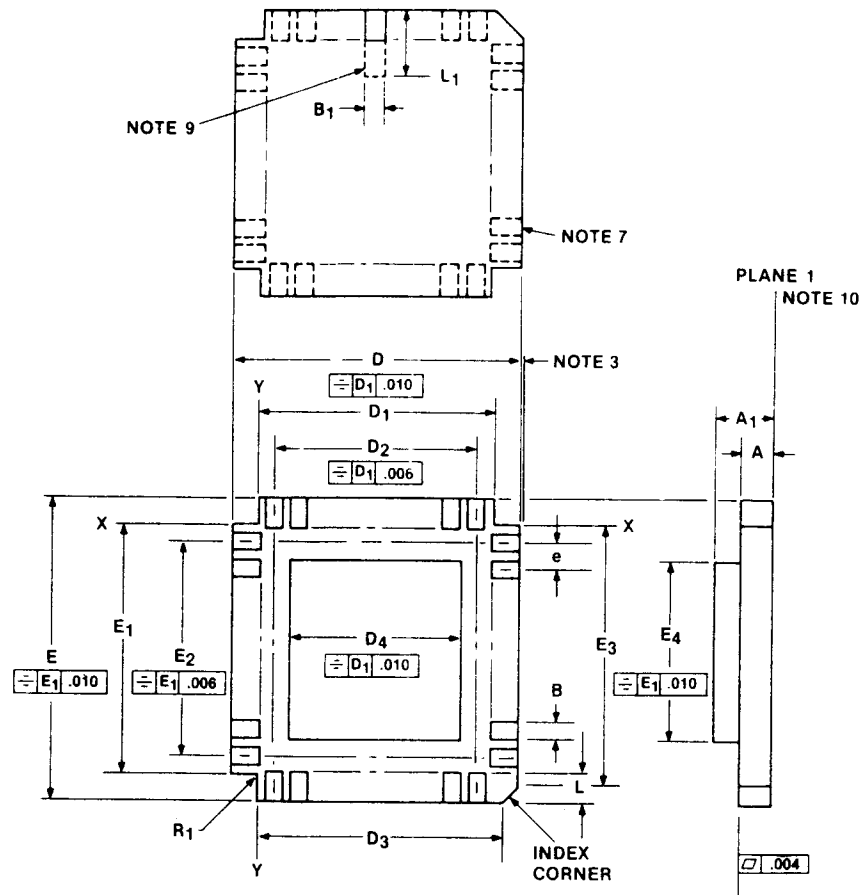


MS002

.050" CENTER, LEADLESS TYPE A



NOTES:

1. REFER TO APPLICABLE SYMBOL LIST.
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5 1973.
3. OVERALL MATERIAL PROTRUSION OF 0.020" (0.508mm) MAXIMUM ABOVE THE MAXIMUM DIMENSION SHOWN, NOT TO EXCEED 0.010" (0.25mm) MAXIMUM PER SIDE.
4. RELIEF ON CORNER TERMINAL MAXIMUM DIMENSION PERMISSIBLE.
5. N IS THE MAXIMUM QUANTITY OF TERMINAL POSITIONS. REFER TO NUMBERING CONVENTION.
6. X AND Y ARE REFERENCE DATUMS.
7. ELECTRICAL CONNECTION IS REQUIRED ON PLANE 2 AND IS OPTIONAL ON PLANE 1.
8. DIMENSIONS VARY IN DIRECT PROPORTION TO FEATURE SIZE OF D_1 AND E_1 .
9. FEATURES FOR ELECTRICAL/OPTICAL ORIENTATION OR HANDLING PURPOSES MUST BE WITHIN THE AREA SHOWN.
10. PLANE 1 IS HEAT RADIATING SURFACE. METALLIZATION IS OPTIONAL, HOWEVER IF PRESENT, A CLEARANCE OF .020" (.508mm) MUST BE MAINTAINED FROM ALL FEATURES.
11. CONTROLLING DIMENSION: INCH.

NOTE				
REF.				
ISSUE				
JEDEC SOLID STATE PRODUCT OUTLINES		TITLE .050" CENTER LEADLESS TYPE A	ISSUE A	DATE 9/29/80
		MS002		

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS											
	AA		NOTE	AB		NOTE	AC		NOTE	AD		NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	.050	.070		.050	.070		.050	.070		.050	.070	
A ₁	.090	.120		.090	.120		.090	.120		.090	.120	
B	.033	.039		.033	.039		.033	.039		.033	.039	
B ₁	.022	.041		.022	.041		.022	.041		.022	.041	
D	.445	.455	3	.643	.657	3	.742	.758	3	.940	.960	3
D ₁	.345	.355		.544	.556		.643	.657		.842	.858	
D ₂	.300		8	.500		8	.600		8	.800		8
D ₃	.365 REF			.566 REF			.667 REF			.868 REF		
D ₄	.278	.290		.350	.490		.386	.590		.458	.790	
E	.445	.455	3	.643	.657	3	.742	.758	3	.940	.960	3
E ₁	.345	.355		.544	.556		.643	.657		.842	.858	
E ₂	.300		8	.500		8	.600		8	.800		8
E ₃	.365 REF			.566 REF			.667 REF			.868 REF		
E ₄	.278	.290		.350	.490		.386	.590		.458	.790	
e	.050 BSC			.050 BSC			.050 BSC			.050 BSC		
L	.045	.055	4	.045	.055	4	.045	.055	4	.045	.055	4
L ₁	.077	.093	9	.077	.093	9	.077	.093	9	.077	.093	9
N	.28		5	.44		5	.52		5	.68		5
R ₁	.000	.010		.000	.010		.000	.010		.000	.010	

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS											
	AA		NOTE	AB		NOTE	AC		NOTE	AD		NOTE
	MIN.	MAX.		MIN.	MAX		MIN.	MAX		MIN.	MAX.	
A	1.27	1.77		1.27	1.77		1.27	1.77		1.27	1.77	
A ₁	2.29	3.04		2.29	3.04		2.29	3.04		2.29	3.04	
B	.839	.990		.839	.990		.839	.990		.839	.990	
B ₁	.56	1.04		.56	1.04		.56	1.04		.56	1.04	
D	11.31	11.55	3	16.34	16.68	3	18.85	19.25	3	23.88	24.38	3
D ₁	8.77	9.01		13.82	14.12		16.34	16.68		21.39	21.79	
D ₂	7.62		8	12.70		8	15.24		8	20.32		8
D ₃	9.27 REF			14.38 REF			16.94 REF			22.05 REF		
D ₄	7.07	7.36		8.9	12.4		9.9	14.9		11.7	20.0	
E	11.31	11.55	3	16.34	16.68	3	18.85	19.25	3	23.88	24.38	3
E ₁	8.77	9.01		13.83	14.12		16.34	16.58		21.39	21.79	
E ₂	7.62		8	12.70		8	15.24		8	20.32		8
E ₃	9.27 REF			14.38 REF			16.94 REF			22.05 REF		
E ₄	7.07	7.36		8.9	12.4		9.9	14.9		11.7	20.0	
e	1.27 BSC			1.27 BSC			1.27 BSC			1.27 BSC		
L	1.15	1.39	4	1.15	1.39	4	1.15	1.39	4	1.15	1.39	4
L ₁	1.96	2.36	9	1.96	2.36	9	1.96	2.36	9	1.96	2.36	9
N	.28		5	.44		5	.52		5	.68		5
R ₁	.00	.25		.00	.25		.00	.25		.00	.25	
NOTE	1, 2, 6, 7, 10, 11			1, 2, 6, 7, 10, 11			1, 2, 6, 7, 10, 11			1, 2, 6, 7, 10, 11		
EF.												
ISSUE												

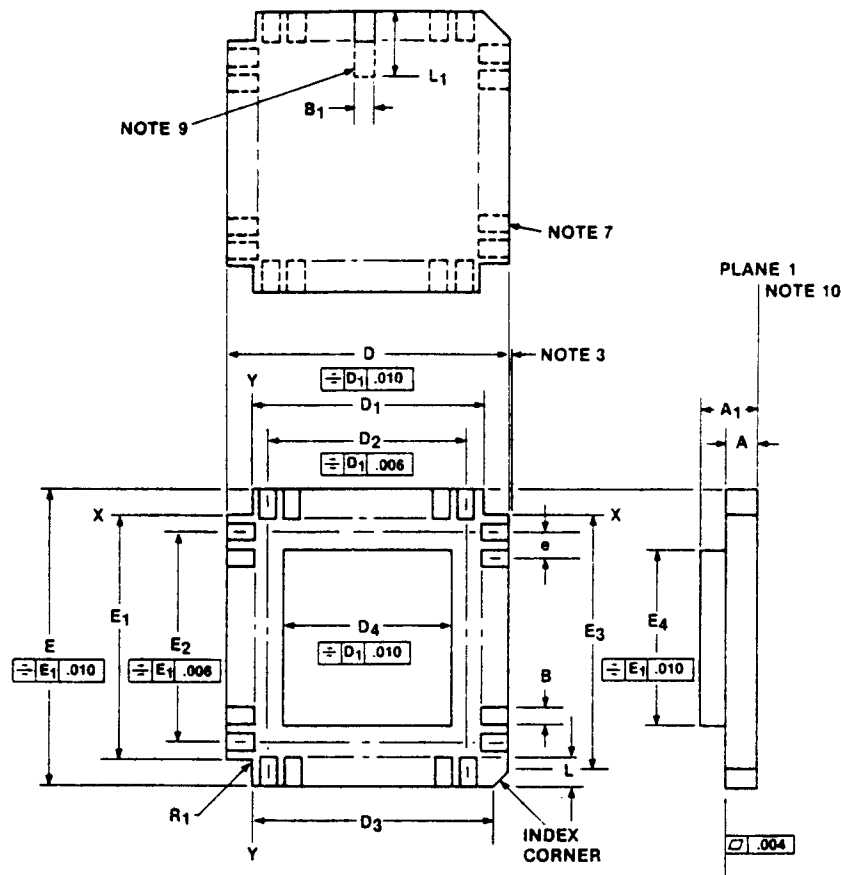
JEDEC
SOLID STATE PRODUCT
OUTLINES

TITLE
.050" CENTER
LEADLESS TYPE A

ISSUE
A
DATE
9/29/80

MS002

STANDARD



NOTES:

1. REFER TO APPLICABLE SYMBOL LIST.
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5 1973.
3. OVERALL MATERIAL PROTRUSION OF 0.020" (0.508mm) MAXIMUM ABOVE THE MAXIMUM DIMENSION SHOWN, NOT TO EXCEED 0.010" (0.25mm) MAXIMUM PER SIDE.
4. RELIEF ON CORNER TERMINAL MAXIMUM DIMENSION PERMISSIBLE.
5. N IS THE MAXIMUM QUANTITY OF TERMINAL POSITIONS. REFER TO NUMBERING CONVENTION.
6. X AND Y ARE REFERENCE DATUMS.
7. ELECTRICAL CONNECTION IS REQUIRED ON PLANE 2 AND IS OPTIONAL ON PLANE 1.
8. DIMENSIONS VARY IN DIRECT PROPORTION TO FEATURE SIZE OF D₁ AND E₁.
9. FEATURES FOR ELECTRICAL/OPTICAL ORIENTATION OR HANDLING PURPOSES MUST BE WITHIN THE AREA SHOWN.
10. PLANE 1 IS HEAT RADIATING SURFACE. METALLIZATION IS OPTIONAL, HOWEVER IF PRESENT, A CLEARANCE OF .020" (.508mm) MUST BE MAINTAINED FROM ALL FEATURES.
11. CONTROLLING DIMENSION: INCH.

NOTE				
REF.				
ISSUE				
JEDEC SOLID STATE PRODUCT OUTLINES		TITLE .050" CENTER LEADLESS TYPE A	ISSUE A	DATE 9/29/80
		MS002		

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS											
	AE		NOTE	AF		NOTE	AG		NOTE	AH		NOTE
	MIN.	MAX.		MIN.	MAX		MIN.	MAX		MIN.	MAX.	
A	.050	.070		.035	.070		.035	.070		.035	.070	
A ₁	.090	.120		.075	.160		.075	.160		.075	.160	
B	.033	.039		.037	.041		.037	.041		.037	.041	
B ₁	.022	.041		.022	.041		.022	.041		.022	.041	
D	1.139	1.161	3	1.339	1.361	3	1.639	1.661	3	2.039	2.061	3
D ₁	1.042	1.058		1.239	1.261		1.539	1.561		1.939	1.961	
D ₂	1.000		8	1.200		8	1.500		8	1.900		8
D ₃	1.069 REF			1.265 REF			1.565 REF			1.965 REF		
D ₄	.530	.990		.602	1.190		.710	1.490		.822	1.890	
E	1.139	1.161	3	1.339	1.361	3	1.639	1.661	3	2.039	2.061	3
E ₁	1.042	1.058		1.239	1.261		1.539	1.561		1.939	1.961	
E ₂	1.000		8	1.200		8	1.500		8	1.900		8
E ₃	1.069 REF			1.265 REF			1.565 REF			1.965 REF		
E ₄	.530	.990		.602	1.190		.710	1.490		.822	1.890	
e	.050 BSC			.050 BSC			.050 BSC			.050 BSC		
L	.045	.055	4	.045	.055	4	.045	.055	4	.045	.055	4
L ₁	.077	.093	9	.077	.093	9	.077	.093	9	.077	.093	9
N	84		5	100		5	124		5	156		5
R ₁	.000	.010		.000	.010		.000	.010		.000	.010	

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS												
	AE		NOTE	AF		NOTE	AG		NOTE	AH		NOTE	
	MIN.	MAX.		MIN.	MAX		MIN.	MAX		MIN.	MAX.		
A	1.27	1.77		.89	1.77		.89	1.77		.89	1.77		
A ₁	2.29	3.04		1.91	4.06		1.91	4.06		1.91	4.06		
B	.839	.990		.940	1.041		.940	1.041		.940	1.041		
B ₁	.56	1.04		.56	1.04		.56	1.04		.56	1.04		
D	28.93	29.48	3	34.02	34.56	3	41.64	42.18	3	51.80	52.34	3	
D ₁	26.47	26.87		31.48	32.02		39.10	39.64		49.26	49.80		
D ₂	25.40		8	30.48		8	38.10		8	48.26		8	
D ₃	27.15 REF			32.13 REF			39.75 REF			49.91 REF			
D ₄	13.5	25.1		15.3	30.2		18.1	37.9		21	48		
E	28.91	29.51	3	34.02	34.56	3	41.64	42.18	3	51.80	52.34	3	
E ₁	26.47	26.87		31.48	32.02		39.10	39.64		49.26	49.80		
E ₂	25.40		8	30.48		8	38.10		8	48.26		8	
E ₃	27.15 REF			32.13 REF			39.75 REF			49.91 REF			
E ₄	13.5	25.1		15.3	30.2		18.1	37.9		21	48		
e	1.27 BSC			1.27 BSC			1.27 BSC			1.27 BSC			
L	1.15	1.39	4	1.15	1.39	4	1.15	1.39	4	1.15	1.39	4	
L ₁	1.96	2.36	9	1.96	2.36	9	1.96	2.36	9	1.96	2.36	9	
N		84	5		100	5		124	5		156	5	
R ₁	.00	.25		.00	.25		.00	.25		.00	.25		
NOTE	1, 2, 6, 7, 10, 11			1, 2, 6, 7, 10, 11			1, 2, 6, 7, 10, 11			1, 2, 6, 7, 10, 11			
REF.													
ISSUE													
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE .050" CENTER LEADLESS TYPE A				ISSUE A		DATE 9/29/80		MS002	

STANDARD