

FIGURE 1 : PRINCIPAL DIMENSIONS AND DATUMS

JEDEC  
SOLID STATE PRODUCT  
OUTLINE

TITLE  
CERAMIC .020" CENTER  
CHIP CARRIER

ISSUE  
A

DATE  
8-1-86

MO-057

REGISTRATION

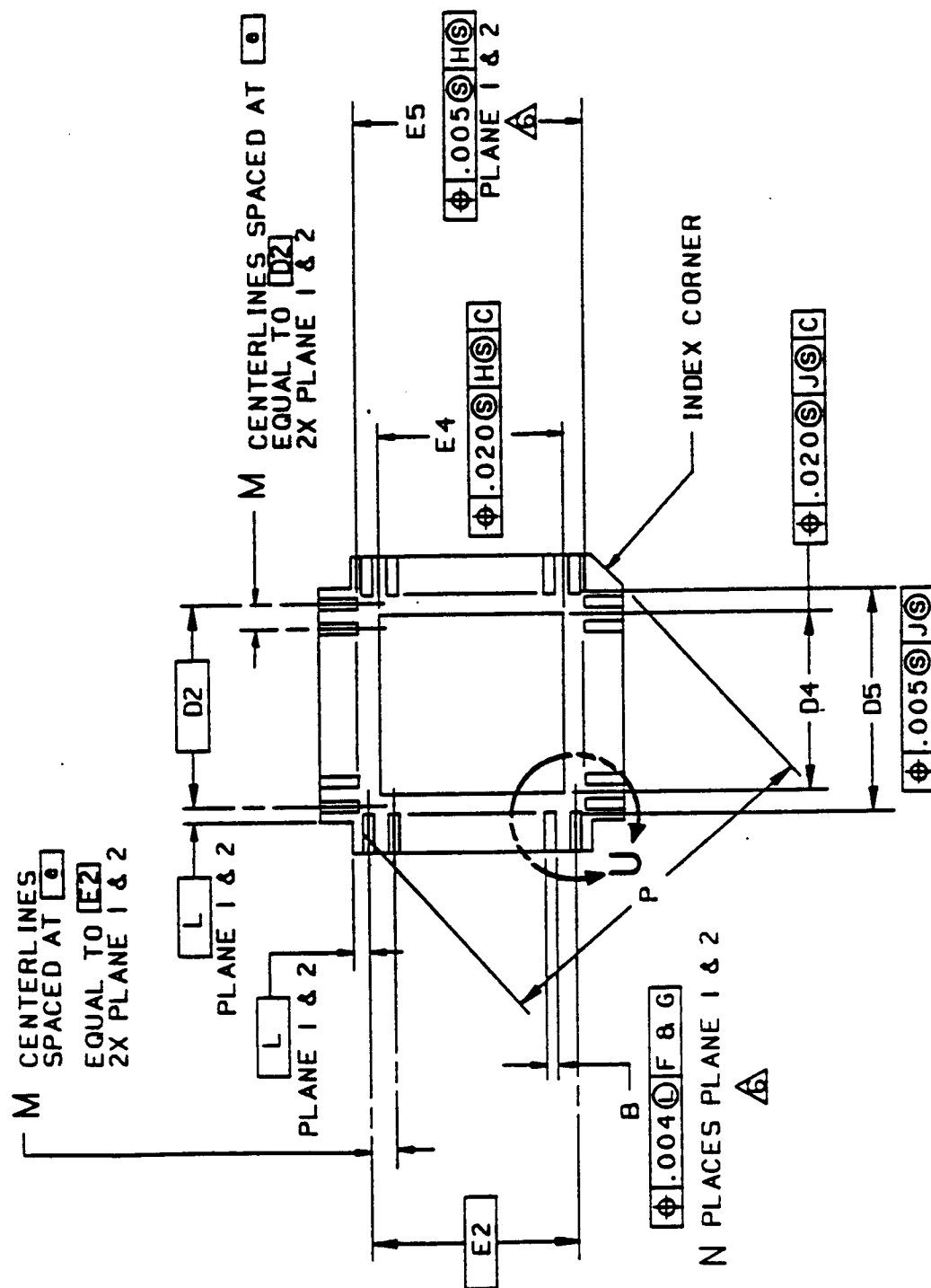


FIGURE 2 : PLANE 2 DETAIL

JEDEC  
SOLID STATE PRODUCT  
OUTLINE

TITLE  
CERAMIC .020" CENTER  
CHIP CARRIER

ISSUE  
A

DATE  
8-1-86

MO-057

REGISTRATION

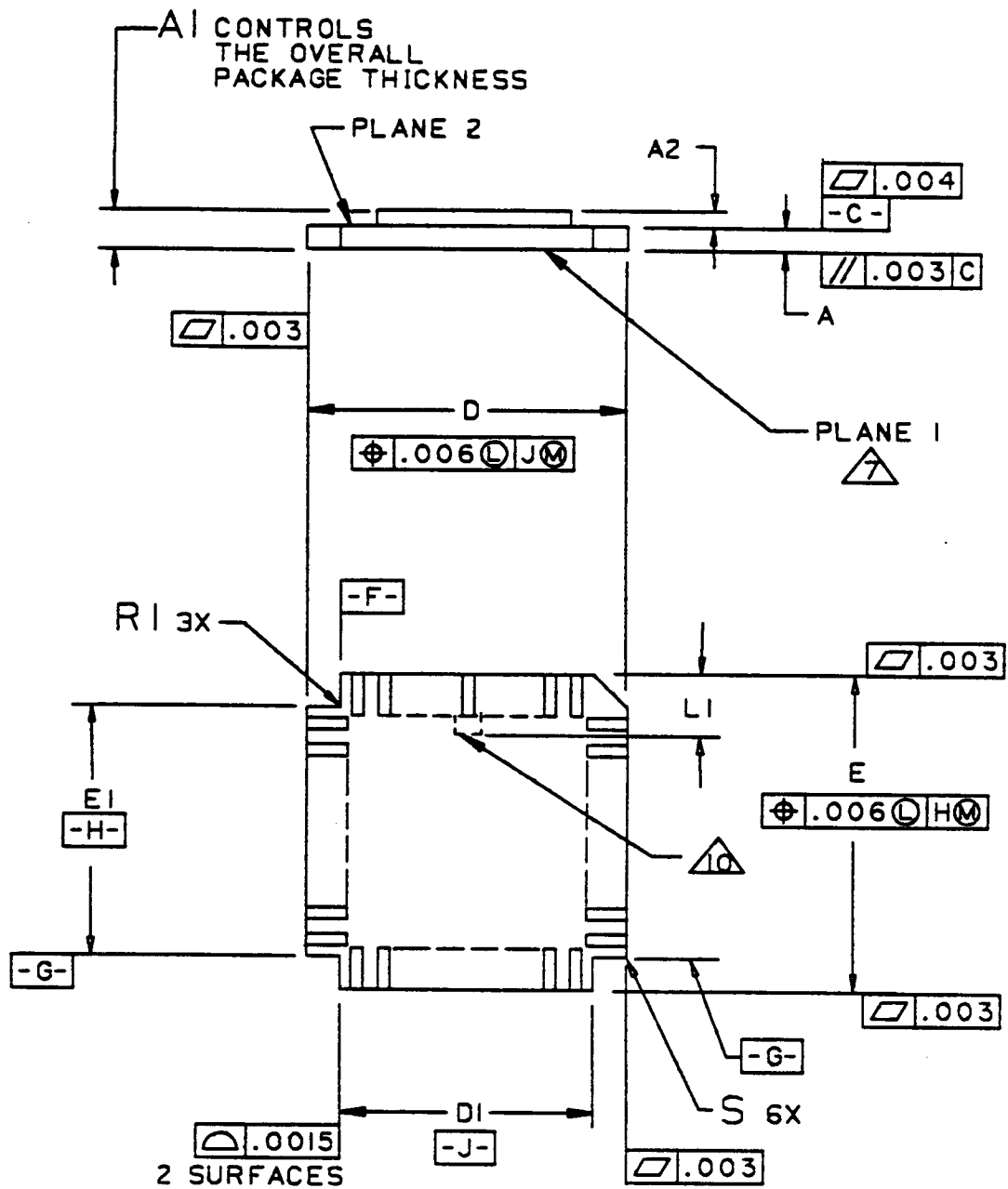
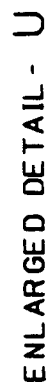


FIGURE 3 : PLANE 1 DETAIL

JEDEC SOLID STATE PRODUCT OUTLINE	TITLE CERAMIC .020" CENTER CHIP CARRIER	ISSUE A	DATE 8-1-86	MO-057
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## REGISTRATION



SEE NOTE 14 FOR  
USE OF TARGETS

### FIGURE 4 : TARGET POSITIONS

## REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS									
	AA		NOTE	AB		NOTE	AC		NOTE	
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		
A	.040	.046		.056	.064		.056	.064		
A1	.110	.134		.126	.152		.100	.120		
A2	.070	.088		.070	.088		.044	.056		
B	.012	.014		.012	.014		.012	.014		
D	.445	.455		.445	.455		.445	.455		
D1	.345	.355		.345	.355		.345	.355		
D2	.300 BASIC			.300 BASIC			.300 BASIC			
D4	.290 MAX			.290 MAX			.290 MAX			
D5	.340	.360	3	.340	.360	3	.340	.360	3	
E1	.445	.455		.445	.455		.445	.455		
E2	.345	.355		.345	.355		.345	.355		
E4	.300 BASIC			.300 BASIC			.300 BASIC			
E5	.290 MAX			.290 MAX			.290 MAX			
E	.340	.360	3	.340	.360	3	.340	.360	3	
L	.020 BASIC			.020 BASIC			.020 BASIC			
L1	.025 BASIC			.025 BASIC			.025 BASIC			
M	.075 MAX		10	.075 MAX		10	.075 MAX		10	
N	.16		8	.16		8	.16		8	
P	.64		4	.64		4	.64		4	
P1	.538	.548		.538	.548		.538	.548		
R1	.000	.020		.000	.020		.000	.020		
S	.005 MAX			.005 MAX			.005 MAX			
T	.412 BASIC			.412 BASIC			.412 BASIC			
T1	.031 BASIC			.031 BASIC			.031 BASIC			

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS											
	AA		NOTE	AB		NOTE	AC		NOTE			NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	1.016	1.168	3	1.423	1.625	3	1.423	1.625	3			
A1	2.794	3.403		3.201	3.860		2.54	3.04				
A2	1.778	2.235		1.778	2.235		1.118	1.422				
B	.305	.355		.305	.355		.305	.355				
D	11.31	11.55		11.31	11.55		11.31	11.55				
D1	8.77	9.01		8.77	9.01		8.77	9.01				
D2	7.620 BASIC			7.620 BASIC			7.620 BASIC					
D4	7.360 MAX			7.360 MAX			7.360 MAX					
D5	8.64	9.14		8.64	9.14		8.64	9.14				
E	11.31	11.55		11.31	11.55		11.31	11.55				
E1	8.77	9.01	8.77	9.01	8.77	9.01	3					
E2	7.620 BASIC		7.620 BASIC		7.620 BASIC							
E4	7.360 MAX		7.360 MAX		7.360 MAX							
E5	8.64	9.14	8.64	9.14	8.64	9.14						
e	.508 BASIC		.508 BASIC		.508 BASIC							
L	.635 BASIC		.635 BASIC		.635 BASIC							
L1	1.905 MAX		1.905 MAX		1.905 MAX							
M	.16		.16		.16							
N	.64		.64		.64							
P	13.67	13.91	13.67	13.91	13.67	13.91					4	
R1	.00	.50	.00	.50	.00	.50						
S	.127 MAX		.127 MAX		.127 MAX							
T	10.46 BASIC		10.46 BASIC		10.46 BASIC							
T1	.787 BASIC		.787 BASIC		.787 BASIC							
NOTE	1.2.5.6.7.9.11.12.13.14			1.2.5.6.7.9.11.12.13.14			1.2.5.6.7.9.11.12.13.14					
REF.												
ISSUE												
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A	DATE 8-1-86	MO-057		

REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS										
	BA		NOTE	BB		NOTE	BC		NOTE		
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.
A	.040	.046		.056	.064		.058	.064			
A1	.110	.134		.126	.152		.100	.120			
A2	.070	.088		.070	.088		.044	.056			
B	.012	.014		.012	.014		.012	.014			
D	.645	.655		.645	.655		.645	.655			
D1	.545	.555		.545	.555		.545	.555			
D2	.500 BASIC			.500 BASIC			.500 BASIC				
D4	.490 MAX			.490 MAX			.490 MAX				
D5	.540	.560	3	.540	.560	3	.540	.560	3		
E1	.645	.655		.645	.655		.645	.655			
E2	.545	.555		.545	.555		.545	.555			
E4	.500 BASIC			.500 BASIC			.500 BASIC				
E5	.490 MAX			.490 MAX			.490 MAX				
E5	.540	.560	3	.540	.560	3	.540	.560	3		
L	.020 BASIC			.020 BASIC			.020 BASIC				
L1	.025 BASIC			.025 BASIC			.025 BASIC				
L1	.075 MAX		10	.075 MAX		10	.075 MAX		10		
M	26		8	26		8	26		8		
N	104		4	104		4	104		4		
P	.821	.831		.821	.831		.821	.831			
R1	.000	.020		.000	.020		.000	.020			
S	.005 MAX			.005 MAX			.005 MAX				
T	.612 BASIC			.612 BASIC			.612 BASIC				
T1	.031 BASIC			.031 BASIC			.031 BASIC				

ALL DIMENSIONS SHOWN IN MILLIMETER

SYMBOL	VARIATIONS										
	BA		NOTE	BB		NOTE	BC		NOTE		
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.
A	1.016	1.168		1.423	1.625		1.423	1.625			
A1	2.794	3.403		3.201	3.860		2.54	3.04			
A2	1.778	2.235		1.778	2.235		1.118	1.422			
B	.305	.355		.305	.355		.305	.355			
D	16.39	16.63		16.39	16.63		16.39	16.63			
D1	13.85	14.09		13.85	14.09		13.85	14.09			
D2	12.70 BASIC			12.70 BASIC			12.70 BASIC				
D4	12.446 MAX			12.446 MAX			12.446 MAX				
D5	13.71	14.22	3	13.71	14.22	3	13.71	14.22	3		
E1	16.39	16.63		16.39	16.63		16.39	16.63			
E2	13.85	14.09		13.85	14.09		13.85	14.09			
E4	12.70 BASIC			12.70 BASIC			12.70 BASIC				
E5	12.446 MAX			12.446 MAX			12.446 MAX				
E5	13.71	14.22	3	13.71	14.22	3	13.71	14.22	3		
L	.508 BASIC			.508 BASIC			.508 BASIC				
L1	.635 BASIC			.635 BASIC			.635 BASIC				
L1	1.905 MAX		10	1.905 MAX		10	1.905 MAX		10		
M	26		8	26		8	26		8		
N	104		4	104		4	104		4		
P	20.86	21.10		20.86	21.10		20.86	21.10			
R1	.00	.50		.00	.50		.00	.50			
S	.127 MAX			.127 MAX			.127 MAX				
T	15.545 BASIC			15.545 BASIC			15.545 BASIC				
T1	.787 BASIC			.787 BASIC			.787 BASIC				

NOTE 1,2,5,6,7,9,11,12,13,14

1,2,5,6,7,9,11,12,13,14

1,2,5,6,7,9,11,12,13,14

REF.

ISSUE

JEDEC  
SOLID STATE PRODUCT  
OUTLINES

TITLE  
CERAMIC .020" CENTER  
CHIP CARRIER

ISSUE  
A

DATE  
8-1-88

MO-057

REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS									
	CA		NOTE	CB		NOTE	CC		NOTE	
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		
A	.040	.048		.056	.084		.056	.064		
A1	.110	.134		.126	.152		.100	.120		
A2	.070	.088		.070	.088		.044	.056		
B	.012	.014		.012	.014		.012	.014		
D	.745	.759		.745	.759		.745	.755		
D1	.645	.655		.645	.655		.645	.655		
D2	.600 BASIC			.600 BASIC			.600 BASIC			
D4	.590 MAX			.590 MAX			.590 MAX			
D5	.640	.660	3	.640	.680	3	.640	.680	3	
E	.745	.755		.745	.755		.745	.755		
E1	.645	.655		.645	.655		.645	.655		
E2	.600 BASIC			.600 BASIC			.600 BASIC			
E4	.590 MAX			.590 MAX			.590 MAX			
E5	.640	.660	3	.640	.660	3	.640	.680	3	
L	.020 BASIC			.020 BASIC			.020 BASIC			
L1	.025 BASIC			.025 BASIC			.025 BASIC			
M	.075 MAX		10	.075 MAX		10	.075 MAX		10	
N	.31		8	.31		8	.31		8	
P	.124		4	.124		4	.124		4	
P1	.962	.972		.962	.972		.962	.972		
S	.000	.020		.000	.020		.000	.020		
T	.005 MAX			.005 MAX			.005 MAX			
T1	.712 BASIC			.712 BASIC			.712 BASIC			
	.031 BASIC			.031 BASIC			.031 BASIC			

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS											
	CA		NOTE	CB		NOTE	CC		NOTE			NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	1.016	1.168		1.423	1.625		1.423	1.625				
A1	2.794	3.403		3.201	3.860		2.54	3.04				
A2	1.778	2.235		1.778	2.235		1.118	1.422				
B	.305	.355		.305	.355		.305	.355				
D	18.93	19.17		18.93	19.17		18.93	19.17				
D1	16.39	16.63		16.39	16.63		16.39	16.63				
D2	15.24	BASIC		15.24	BASIC		15.24	BASIC				
D4	14.980	MAX		14.980	MAX		14.980	MAX				
D5	16.26	16.76	3	16.26	16.76	3	16.26	16.76	3			
E	18.93	19.17		18.93	19.17		18.93	19.17				
E1	16.39	16.63		16.39	16.63		16.39	16.63				
E2	15.24	BASIC		15.24	BASIC		15.24	BASIC				
E4	14.980	MAX		14.980	MAX		14.980	MAX				
E5	16.26	16.76	3	16.26	16.76	3	16.26	16.76	3			
L	.508	BASIC		.508	BASIC		.508	BASIC				
L1	.635	BASIC		.635	BASIC		.635	BASIC				
M	1.905	MAX	10	1.905	MAX	10	1.905	MAX	10			
N	.31		8	.31		8	.31		8			
P	.124		4	.124		4	.124		4			
P1	24.44	24.68		24.44	24.68		24.44	24.68				
S	.00	.50		.00	.50		.00	.50				
T	.127	MAX		.127	MAX		.127	MAX				
T1	18.085	BASIC		18.085	BASIC		18.085	BASIC				
	.787	BASIC		.787	BASIC		.787	BASIC				
NOTE			1,2,5,6,7,8,11,12,13,14		1,2,5,6,7,8,11,12,13,14			1,2,5,6,7,8,11,12,13,14				
REF												
ISSUE												
JEDEC SOLID STATE PRODUCT OUTLINES			TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A		DATE 8-1-86		MO-057	

REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS										
	DA		NOTE	DB		NOTE	DC		NOTE		
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.
A	.040	.046		.056	.064		.056	.064			
A1	.110	.134		.126	.152		.100	.120			
A2	.070	.088		.070	.088		.044	.056			
B	.012	.014		.012	.014		.012	.014			
D	.945	.955		.945	.955		.945	.955			
D1	.845	.855		.845	.855		.845	.855			
D2	.800	BASIC		.800	BASIC		.800	BASIC			
D4	.790	MAX		.790	MAX		.790	MAX			
D5	.840	.860	3	.840	.860	3	.840	.860	3		
E	.945	.955		.945	.955		.945	.955			
E1	.845	.855		.845	.855		.845	.855			
E2	.800	BASIC		.800	BASIC		.800	BASIC			
E4	.790	MAX		.790	MAX		.790	MAX			
E5	.840	.860	3	.840	.860	3	.840	.860	3		
e	.020	BASIC		.020	BASIC		.020	BASIC			
L	.025	BASIC		.025	BASIC		.025	BASIC			
L1	.075	MAX	10	.075	MAX	10	.075	MAX	10		
M	41		8	41		8	41		8		
N	164		4	164		4	164		4		
P	1.245	1.255		1.245	1.255		1.245	1.255			
R1	.000	.020		.000	.020		.000	.020			
S	.005	MAX		.005	MAX		.005	MAX			
T	.920	BASIC		.920	BASIC		.920	BASIC			
T1	.031	BASIC		.031	BASIC		.031	BASIC			

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS											
	DA		NOTE	DB		NOTE	DC		NOTE			NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	1.016	1.168	3	1.423	1.625	3	1.423	1.625	3			
A1	2.794	3.403		3.201	3.860		2.54	3.04				
A2	1.778	2.235		1.778	2.235		1.118	1.422				
B	.305	.355		.305	.355		.305	.355				
D	24.01	24.25		24.01	24.25		24.01	24.25				
D1	21.47	21.71		21.47	21.71		21.47	21.71				
D2	20.32	BASIC		20.32	BASIC		20.32	BASIC				
D4	20.066	MAX		20.066	MAX		20.066	MAX				
D5	21.34	21.84		21.34	21.84		21.34	21.84				
E	24.01	24.25		24.01	24.25		24.01	24.25				
E1	21.47	21.71	21.47	21.71	21.47	21.71						
E2	20.32	BASIC	20.32	BASIC	20.32	BASIC						
E4	20.066	MAX	20.066	MAX	20.066	MAX						
E5	21.34	21.84	3	21.34	21.84	3	21.34	21.84	3			
e	.508	BASIC		.508	BASIC		.508	BASIC				
L	.635	BASIC		.635	BASIC		.635	BASIC				
L1	1.905	MAX		1.905	MAX		1.905	MAX				
M	41	8	4	41	8	4	41	8	4			
N	164			164			164					
P	31.63	31.87	10	31.63	31.87	10	31.63	31.87	10			
R1	.00	.50		.00	.50		.00	.50				
S	.127	MAX		.127	MAX		.127	MAX				
T	23.368	BASIC		23.368	BASIC		23.368	BASIC				
T1	.787	BASIC		.787	BASIC		.787	BASIC				
NOTE	1, 2, 5, 6, 7, 8, 11, 12, 13, 14			1, 2, 5, 6, 7, 8, 11, 12, 13, 14			1, 2, 5, 6, 7, 8, 11, 12, 13, 14					
REF												
ISSUE												
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A	DATE 8-1-88	MO-057		

REGISTRATION



ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS									
	EA		NOTE	EB		NOTE	EC		NOTE	
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		
A	.040	.046		.056	.064		.056	.064		
A1	.110	.134		.126	.152		.100	.120		
A2	.070	.088		.070	.088		.044	.056		
B	.012	.014		.012	.014		.012	.014		
D	1.145	1.155		1.145	1.155		1.145	1.155		
D1	1.045	1.055		1.045	1.055		1.045	1.055		
D2	1.00 BASIC			1.00 BASIC			1.00 BASIC			
D4	.990 MAX			.990 MAX			.990 MAX			
D5	1.040	1.060	3	1.040	1.060	3	1.040	1.060	3	
E	1.145	1.155		1.145	1.155		1.145	1.155		
E1	1.045	1.055		1.045	1.055		1.045	1.055		
E2	1.00 BASIC			1.00 BASIC			1.00 BASIC			
E4	.990 MAX			.990 MAX			.990 MAX			
E5	1.040	1.060	3	1.040	1.060	3	1.040	1.060	3	
e	.020 BASIC			.020 BASIC			.020 BASIC			
L	.025 BASIC			.025 BASIC			.025 BASIC			
L1	.075 MAX		10	.075 MAX		10	.075 MAX		10	
M	.51		8	.51		8	.51		8	
N	.204		4	.204		4	.204		4	
P	1.528	1.538		1.528	1.538		1.528	1.538		
R1	.000	.020		.000	.020		.000	.020		
S	.005 MAX			.005 MAX			.005 MAX			
T	1.120 BASIC			1.120 BASIC			1.120 BASIC			
T1	.031 BASIC			.031 BASIC			.031 BASIC			

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS												
	EA		NOTE	EB		NOTE	EC		NOTE			NOTE	
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		
A	1.016	1.168		1.429	1.625		1.423	1.625					
A1	2.794	3.403		3.201	3.860		2.54	3.04					
A2	1.778	2.235		1.778	2.235		1.118	1.422					
B	.305	.355		.305	.355		.305	.355					
D	29.09	29.33		29.09	29.33		29.09	29.33					
D1	26.55	26.79		26.55	26.79		26.55	26.79					
D2	25.40	BASIC		25.40	BASIC		25.40	BASIC					
D4	25.146	MAX		25.146	MAX		25.146	MAX					
D5	26.42	26.92	3	26.42	26.92	3	26.42	26.92	3				
E	29.09	29.33		29.09	29.33		29.09	29.33					
E1	26.55	26.79		26.55	26.79		26.55	26.79					
E2	25.40	BASIC		25.40	BASIC		25.40	BASIC					
E4	25.146	MAX		25.146	MAX		25.146	MAX					
E5	26.42	26.92	3	26.42	26.92	3	26.42	26.92	3				
e	.508	BASIC		.508	BASIC		.508	BASIC					
L	.635	BASIC		.635	BASIC		.635	BASIC					
L1	1.905	MAX	10	1.905	MAX	10	1.905	MAX	10				
M	.51		8	.51		8	.51		8				
N	.204		4	.204		4	.204		4				
P	38.82	39.06		38.82	39.06		38.82	39.06					
R1	.00	.50		.00	.50		.00	.50					
S	.127	MAX		.127	MAX		.127	MAX					
T	28.448	BASIC		28.448	BASIC		28.448	BASIC					
T1	.787	BASIC		.787	BASIC		.787	BASIC					
NOTE	1,2,5,8,7,9,11,12,13,14			1,2,5,8,7,9,11,12,13,14			1,2,5,8,7,9,11,12,13,14						
REF.													
ISSUE													
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A		DATE 8-1-86		MO-057	

REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS											
	FA		NOTE	FB		NOTE	FC		NOTE			NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	.040	.046		.056	.084		.056	.064				
A1	.110	.134		.126	.152		.100	.120				
A2	.070	.088		.070	.088		.044	.056				
B	.012	.014		.012	.014		.012	.014				
D	1.345	1.355		1.345	1.355		1.345	1.355				
D1	1.245	1.255		1.245	1.255		1.245	1.255				
D2	1.200 BASIC			1.200 BASIC			1.200 BASIC					
D4	1.190 MAX			1.190 MAX			1.190 MAX					
D5	1.240	1.260	3	1.240	1.260	3	1.240	1.260	3			
E	1.345	1.355		1.345	1.355		1.345	1.355				
E1	1.245	1.255		1.245	1.255		1.245	1.255				
E2	1.200 BASIC			1.200 BASIC			1.200 BASIC					
E4	1.190 MAX			1.190 MAX			1.190 MAX					
E5	1.240	1.260	3	1.240	1.260	3	1.240	1.260	3			
L	.020 BASIC			.020 BASIC			.020 BASIC					
L1	.025 BASIC			.025 BASIC			.025 BASIC					
M	.075 MAX		10	.075 MAX		10	.075 MAX		10			
N	.61		8	.61		8	.61		8			
P	.244		4	.244		4	.244		4			
R1	1.810	1.820		1.810	1.820		1.810	1.820				
S	.000	.020		.000	.020		.000	.020				
T	.005 MAX			.005 MAX			.005 MAX					
T1	1.32 BASIC			1.32 BASIC			1.32 BASIC					
	.031 BASIC			.031 BASIC			.031 BASIC					

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS											
	FA		NOTE	FB		NOTE	FC		NOTE			NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	1.016	1.168	3	1.423	1.625	3	1.423	1.625	3			
A1	2.794	3.403		3.201	3.860		2.54	3.04				
A2	1.778	2.235		1.778	2.235		1.118	1.422				
B	.305	.355		.305	.355		.305	.355				
D	34.17	34.41		34.17	34.41		34.17	34.41				
D1	31.63	31.86		31.63	31.86		31.63	31.86				
D2	30.48 BASIC			30.48 BASIC			30.48 BASIC					
D4	30.22 MAX			30.22 MAX			30.22 MAX					
D5	31.50	32.00		31.50	32.00		31.50	32.00				
E	34.17	34.41		34.17	34.41		34.17	34.41				
E1	31.63	31.86	31.63	31.86	31.63	31.86						
E2	30.48 BASIC		30.48 BASIC		30.48 BASIC							
E4	30.22 MAX		30.22 MAX		30.22 MAX							
E5	31.50	32.00	3	31.50	32.00	3	31.50	32.00	3			
L	.508 BASIC		.508 BASIC		.508 BASIC							
L1	.635 BASIC		.635 BASIC		.635 BASIC							
M	1.905 MAX	10	1.905 MAX	10	1.905 MAX	10						
N	.61	8	.61	8	.61	8						
P	.244	4	.244	4	.244	4						
R1	45.98	46.22	45.98	46.22	45.98	46.22						
S	.00	.50	.00	.50	.00	.50						
T	.127 MAX		.127 MAX		.127 MAX							
T1	33.528 BASIC		33.528 BASIC		33.528 BASIC							
	.787 BASIC		.787 BASIC		.787 BASIC							
NOTE	1.2.5.6.7.9.11.12.13.14			1.2.5.6.7.9.11.12.13.14			1.2.5.6.7.9.11.12.13.14					
REF.												
ISSUE												
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A	DATE 8-1-86	MO-057		

REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS											
	GA		NOTE	GB		NOTE	GC		NOTE			NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	.040	.046		.056	.084		.056	.064				
A1	.110	.134		.126	.152		.100	.120				
A2	.070	.088		.070	.088		.044	.056				
B	.012	.014		.012	.014		.012	.014				
D	1.445	1.455		1.445	1.455		1.445	1.455				
D1	1.345	1.355		1.345	1.355		1.345	1.355				
D2	1.300	BASIC		1.300	BASIC		1.300	BASIC				
D4	1.290	MAX		1.290	MAX		1.290	MAX				
D5	1.340	1.360	3	1.340	1.360	3	1.340	1.360	3			
E	1.445	1.455		1.445	1.455		1.445	1.455				
E1	1.345	1.355		1.345	1.355		1.345	1.355				
E2	1.300	BASIC		1.300	BASIC		1.300	BASIC				
E4	1.290	MAX		1.290	MAX		1.290	MAX				
E5	1.340	1.360	3	1.340	1.360	3	1.340	1.360	3			
L	.020	BASIC		.020	BASIC		.020	BASIC				
L1	.025	BASIC		.025	BASIC		.025	BASIC				
M	.075	MAX	10	.075	MAX	10	.075	MAX	10			
N	.68		8	.66		8	.66		8			
P	.264		4	.264		4	.264		4			
R1	1.952	1.962		1.952	1.962		1.952	1.962				
S	.000	.020		.000	.020		.000	.020				
T	.005	MAX		.005	MAX		.005	MAX				
T1	1.412	BASIC		1.412	BASIC		1.412	BASIC				
	.031	BASIC		.031	BASIC		.031	BASIC				

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS												
	GA		NOTE	GB		NOTE	GC		NOTE			NOTE	
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		
A	1.016	1.168		1.423	1.625		1.423	1.625					
A1	2.794	3.403		3.201	3.860		2.54	3.04					
A2	1.778	2.235		1.778	2.235		1.118	1.422					
B	.305	.355		.305	.355		.305	.355					
D	36.71	36.95		36.71	36.95		36.71	36.95					
D1	34.17	34.41		34.17	34.41		34.17	34.41					
D2	33.02	BASIC		33.02	BASIC		33.02	BASIC					
D4	32.76	MAX		32.76	MAX		32.76	MAX					
D5	34.04	34.54	3	34.04	34.54	3	34.04	34.54	3				
E	36.71	36.95		36.71	36.95		36.71	36.95					
E1	34.17	34.41		34.17	34.41		34.17	34.41					
E2	33.02	BASIC		33.02	BASIC		33.02	BASIC					
E4	32.76	MAX		32.76	MAX		32.76	MAX					
E5	34.04	34.54	3	34.04	34.54	3	34.04	34.54	3				
L	.508	BASIC		.508	BASIC		.508	BASIC					
L1	.635	BASIC		.635	BASIC		.635	BASIC					
M	1.905	MAX	10	1.905	MAX	10	1.905	MAX	10				
N	.66		8	.66		8	.66		8				
P	.264		4	.264		4	.264		4				
R1	49.58	49.83		49.58	49.83		49.58	49.83					
S	.00	.50		.00	.50		.00	.50					
T	.127	MAX		.127	MAX		.127	MAX					
T1	35.86	BASIC		35.86	BASIC		35.86	BASIC					
	.787	BASIC		.787	BASIC		.787	BASIC					
NOTE	1,2,5,6,7,8,11,12,13,14			1,2,5,6,7,8,11,12,13,14			1,2,5,6,7,8,11,12,13,14						
REF.													
ISSUE													
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A		DATE 8-1-86		MO-057	

REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS											
	HA		NOTE	HB		NOTE	HC		NOTE			NOTE
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.	
A	.040	.046	3	.056	.064	3	.056	.064	3			
A1	.110	.134		.126	.152		.100	.120				
A2	.070	.088		.070	.088		.044	.056				
B	.012	.014		.012	.014		.012	.014				
D	1.545	1.555		1.545	1.555		1.545	1.555				
D1	1.445	1.455	3	1.445	1.455	3	1.445	1.455	3			
D2	1.400 BASIC			1.400 BASIC			1.400 BASIC					
D4	1.390 MAX			1.390 MAX			1.390 MAX					
D5	1.440	1.460		1.440	1.460		1.440	1.460				
E	1.545	1.555		1.545	1.555		1.545	1.555				
E1	1.445	1.455	3	1.445	1.455	3	1.445	1.455	3			
E2	1.400 BASIC			1.400 BASIC			1.400 BASIC					
E4	1.390 MAX			1.390 MAX			1.390 MAX					
E5	1.440	1.460		1.440	1.460		1.440	1.460				
L	.020 BASIC			.020 BASIC			.020 BASIC					
L1	.025 BASIC		10	.025 BASIC		10	.025 BASIC		10			
M	.075 MAX			.075 MAX			.075 MAX					
N	.71			.71			.71					
P	.284			.284			.284					
P1	2.093	2.103		2.093	2.103		2.093	2.103				
R	.000	.020	4	.000	.020	4	.000	.020	4			
S	.005 MAX			.005 MAX			.005 MAX					
T	1.512 BASIC			1.512 BASIC			1.512 BASIC					
T1	.031 BASIC			.031 BASIC		.031 BASIC						

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS												
	HA		NOTE	HB		NOTE	HC		NOTE			NOTE	
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		
A	1.016	1.168	3	1.423	1.625	3	1.423	1.625	3				
A1	2.794	3.403		3.201	3.860		2.54	3.04					
A2	1.778	2.235		1.778	2.235		1.118	1.422					
B	.305	.355		.305	.355		.305	.355					
D	39.25	39.49		39.25	39.49		39.25	39.49					
D1	36.71	36.95	3	36.71	36.95	3	36.71	36.95	3				
D2	35.56	BASIC		35.56	BASIC		35.56	BASIC					
D4	35.30	MAX		35.30	MAX		35.30	MAX					
D5	36.58	37.08		36.58	37.08		36.58	37.08					
E	39.25	39.49		39.35	39.49		39.25	39.49					
E1	36.71	36.95	3	36.71	36.95	3	36.71	36.95	3				
E2	35.56	BASIC		35.56	BASIC		35.56	BASIC					
E4	35.30	MAX		35.30	MAX		35.30	MAX					
E5	36.58	37.08		36.58	37.08		36.58	37.08					
L	.508	BASIC		.508	BASIC		.508	BASIC					
L1	.635	BASIC	10 8 4	.635	BASIC	10 8 4	.635	BASIC	10 8 4				
M	1.905	MAX		1.905	MAX		1.905	MAX					
N	.71			.71			.71						
P	.284			.284			.284						
P1	53.16	53.41		53.16	53.41		53.16	53.41					
R1	.00	.50		.00	.50		.00	.50					
S	.127	MAX		.127	MAX		.127	MAX					
T	38.40	BASIC		38.40	BASIC		38.40	BASIC					
T1	.787	BASIC		.787	BASIC		.787	BASIC					
NOTE	1,2,5,6,7,8,11,12,13,14			1,2,5,6,7,8,11,12,13,14			1,2,5,6,7,8,11,12,13,14						
REF.													
ISSUE													
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A		DATE 8-1-86		MO-057	

REGISTRATION

ALL DIMENSIONS SHOWN IN INCHES

SYMBOL	VARIATIONS										
	JA		NOTE	JB		NOTE	JC		NOTE		
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.
A	.040	.046		.056	.084		.058	.064			
A1	.110	.134		.126	.152		.100	.120			
A2	.070	.088		.070	.088		.044	.056			
B	.012	.014		.012	.014		.012	.014			
D	1.645	1.655		1.645	1.655		1.645	1.655			
D1	1.545	1.555		1.545	1.555		1.545	1.555			
D2	1.500 BASIC			1.500 BASIC			1.500 BASIC				
D4	1.490 MAX			1.490 MAX			1.490 MAX				
D5	1.540	1.560	3	1.540	1.580	3	1.540	1.560	3		
E	1.645	1.655		1.645	1.655		1.645	1.655			
E1	1.545	1.555		1.545	1.555		1.545	1.555			
E2	1.500 BASIC			1.500 BASIC			1.500 BASIC				
E4	1.490 MAX			1.490 MAX			1.490 MAX				
E5	1.540	1.560	3	1.540	1.580	3	1.540	1.560	3		
L	.020 BASIC			.020 BASIC			.020 BASIC				
L1	.025 BASIC			.025 BASIC			.025 BASIC				
M	.075 MAX		10	.075 MAX		10	.075 MAX		10		
N	.76		8	.76		8	.76		8		
P	.304		4	.304		4	.304		4		
P1	2.235	2.245		2.235	2.245		2.235	2.245			
R1	.000	.020		.000	.020		.000	.020			
S	.005 MAX			.005 MAX			.005 MAX				
T	1.62 BASIC			1.62 BASIC			1.62 BASIC				
T1	.031 BASIC			.031 BASIC			.031 BASIC				

ALL DIMENSIONS SHOWN IN MILLIMETERS

SYMBOL	VARIATIONS												
	JA		NOTE	JB		NOTE	JC		NOTE			NOTE	
	MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		MIN.	MAX.		
A	1.016	1.168	3	1.423	1.625	3	1.423	1.625	3				
A1	2.794	3.403		3.201	3.860		2.54	3.04					
A2	1.778	2.235		1.778	2.235		1.118	1.422					
B	.305	.355		.305	.355		.305	.355					
D	41.79	42.03		41.79	42.03		41.79	42.03					
D1	39.25	39.49		39.25	39.49		39.25	39.49					
D2	38.10 BASIC			38.10 BASIC			38.10 BASIC						
D4	37.84 MAX			37.84 MAX			37.84 MAX						
D5	39.12	39.62		39.12	39.62		39.12	39.62					
E	41.79	42.03		41.79	42.03		41.79	42.03					
E1	39.25	39.49	39.25	39.49	39.25	39.49							
E2	38.10 BASIC		38.10 BASIC		38.10 BASIC								
E4	37.84 MAX		37.84 MAX		37.84 MAX								
E5	39.12	39.62	3	39.12	39.62	3	39.12	39.62	3				
L	.508 BASIC			.508 BASIC			.508 BASIC						
L1	.635 BASIC			.635 BASIC			.635 BASIC						
M	1.905 MAX	10	1.905 MAX	10	1.905 MAX	10	1.905 MAX	10					
N	.76	8	.76	8	.76	8	.76	8					
P	.304	4	.304	4	.304	4	.304	4					
P1	56.77	57.02	56.77	57.02	56.77	57.02							
R1	.00	.50	.00	.50	.00	.50							
S	.127 MAX		.127 MAX		.127 MAX								
T	41.148 BASIC		41.148 BASIC		41.148 BASIC		41.148 BASIC						
T1	.787 BASIC		.787 BASIC		.787 BASIC		.787 BASIC						
NOTE	1.2.5.6.7.9.11.12.13.14			1.2.5.6.7.9.11.12.13.14			1.2.5.6.7.9.11.12.13.14						
REF.													
ISSUE													
JEDEC SOLID STATE PRODUCT OUTLINES				TITLE CERAMIC .020" CENTER CHIP CARRIER				ISSUE A		DATE 8-1-86		MO-057	

REGISTRATION

NOTES:

1. REFER TO APPLICABLE SYMBOL LIST.
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M 1982.
3. RELIEF ON CORNER TERMINAL MAXIMUM DIMENSION PERMISSIBLE IN ORDER TO ENSURE MINIMUM CONDUCTOR SPACING (OF .004) .
4. N IS THE MAXIMUM QUANTITY OF TERMINAL POSITIONS. REFER TO NUMBERING CONVENTION.
5. F AND G ARE REFERENCE DATUMS.
6. ELECTRICAL CONNECTION IS REQUIRED ON PLANE 2 AND IS OPTIONAL ON PLANE 1.
7. PLANE 1 IS HEAT RADIATING SURFACE. METALLIZATION IS OPTIONAL. HOWEVER, IF PRESENT, A CLEARANCE OF .020" (.508 mm) MUST BE MAINTAINED FROM ALL PHYSICAL FEATURES.
8. M IS THE NUMBER OF TERMINAL POSITIONS ON ONE EDGE OF THE PACKAGE.
9. CONTROLLING DIMENSION: INCH
10. FEATURES FOR ELECTRICAL/OPTICAL ORIENTATION OR HANDLING PURPOSES MUST BE WITHIN THE AREA SHOWN.
11. MAXIMUM PULLBACK OF METALLIZATION OF .005" FROM EDGE IS ALLOWED.
12. SURFACE FINISH TO BE 12 TO 23 MICROINCHES BOTH SIDES.
13. SUBSTRATE SHALL BE FREE OF BURRS. CORNERS SHALL BE FREE OF ASPERITIES.
14. TARGET POSITIONS SHOWN ARE FOR DETERMINATION OF -F- AND -G-. TARGETS G1 AND G2 DETERMINE DATUM -G- . TARGET F1 WITH PERPENDICULARITY REQUIREMENT WITH RESPECT TO -G- DETERMINES -F- .  $\text{M}$  CAN BE USED TO DETERMINE IF PACKAGE ADHERES TO  $\Delta$ .0015.

JEDEC SOLID STATE PRODUCT OUTLINES	TITLE CERAMIC .020" CENTER CHIP CARRIER	ISSUE A	DATE 8-1-86	MO-057
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REGISTRATION