



MCS[®]-51 and MCS[®]-96 Packaging Information

July 2004



Order Number: 272118-002

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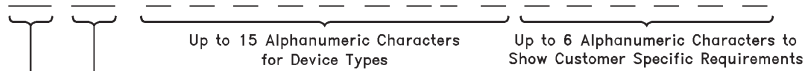
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MCS-51 and MCS-96 Packaging Information

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Intel Product Identification Codes



Package Type

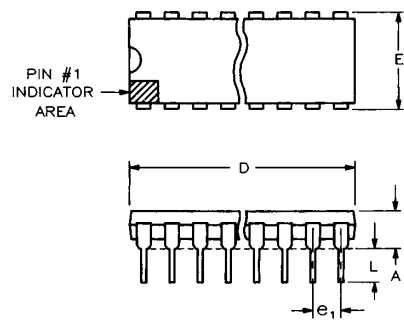
- Ceramic Pin Grid Array
 - Ceramic Dual In-Line Package
 - Cerdip Dual In-Line Package
 - Plastic Quad Flatpack Package, Fine Pitch, Die Up
 - Plastic Leaded Chip Carrier
 - Plastic Dual In-Line Package
 - Ceramic Leadless Chip Carrier
 - Quad Flatpack Package
 - Plastic Dual In-Line Package (Shrink)
-
- Indicates extended operating temperature range (-40°C to $+85^{\circ}\text{C}$) express product with 160 ± 8 hrs. dynamic burn-in.
 - Indicates commercial temperature range (0°C to 70°C) express product with 160 ± 8 hrs. dynamic burn-in
 - Indicates extended temperature range (-40°C to $+85^{\circ}\text{C}$) express product without burn-in.

272118-12

Note: Package type and temperature variables have changed. They are now indicated by x.



40-LEAD PLASTIC DUAL IN-LINE PACKAGE

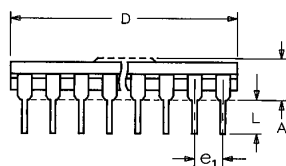
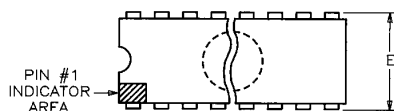


272118±1

Family: Plastic Dual In-Line Package		
Symbol	Millimeters Approx *	Inches Approx *
A	5	0.2
D	53	2.1
E	16	0.6
e ₁	2.5	0.10
L	3	0.1

*For exact dimensions consult the Packaging Handbook (#240800).

40-LEAD Cerdip DUAL IN-LINE PACKAGE



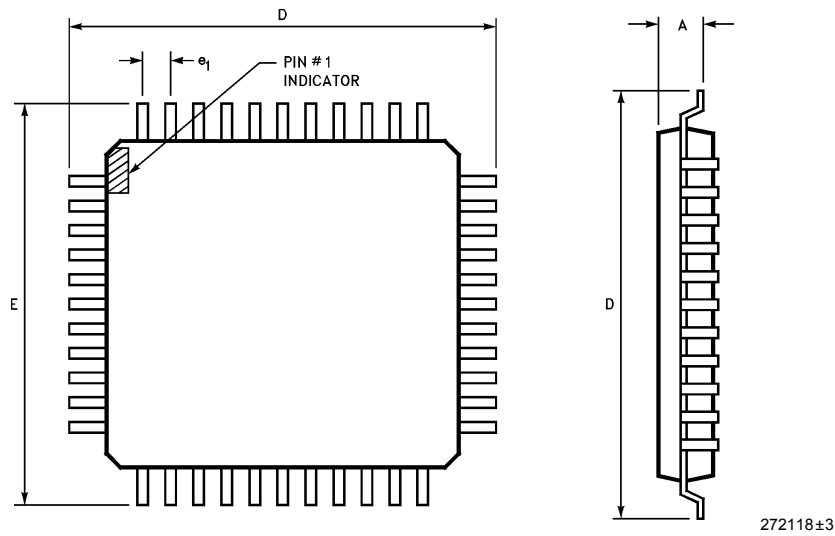
272118±2

Family: Cerdip Dual In-Line Package		
Symbol	Millimeters Approx *	Inches Approx *
A	5.8	0.2
D	53	2.1
E	16	0.6
e ₁	2.5	0.10
L	3	0.1

*For exact dimensions consult the Packaging Handbook (#240800).



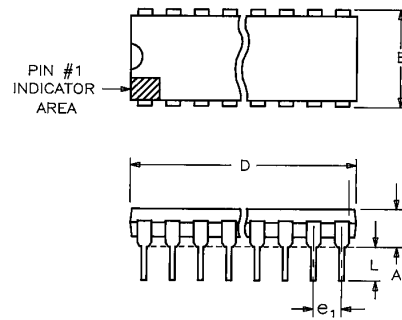
44-LEAD QUAD FLATPACK PACKAGE
VARIATION: SQUARE



Family: Quad Flatpack Package	
Symbol	Millimeters Approx *
A	3
D	13
E	13
e ₁	0.8

*For exact dimensions consult the Packaging Handbook (#240800).

48-LEAD PLASTIC DUAL IN-LINE PACKAGE



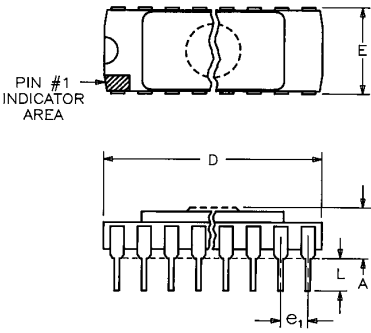
272118±4

Family: Plastic Dual In-Line Package		
Symbol	Millimeters Approx *	Inches Approx *
A	5	0.2
D	62	2.5
E	16	0.6
e ₁	2.5	0.1
L	3	0.1

*For exact dimensions consult the Packaging Handbook (#240800).



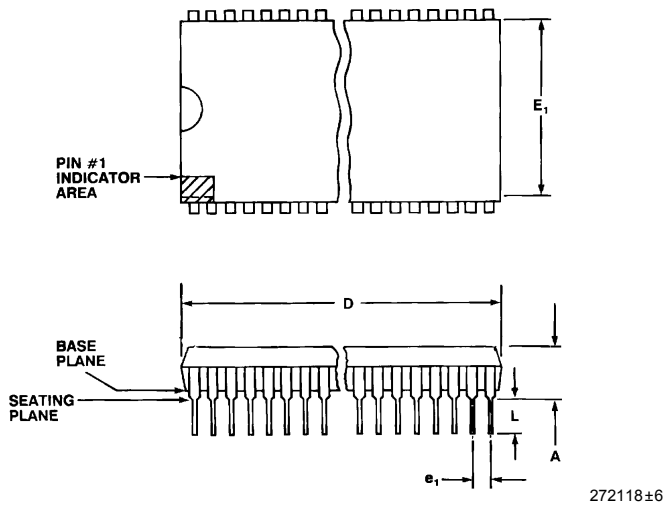
48-LEAD CERAMIC DUAL IN-LINE PACKAGE



Family: Ceramic Side Braze Dual In-Line		
Symbol	Millimeters Approx *	Inches Approx *
A	6(1)	0.2(1)
A	7(2)	0.3(2)
D	62	2.5
E	16	0.6
e ₁	2.5	0.1
L	3	0.1

NOTES:
1. Solid LID
2. EPROM LID
*For exact dimensions consult the Packaging Handbook (#240800).

64-LEAD PLASTIC DUAL IN-LINE PACKAGE (SHRINK)



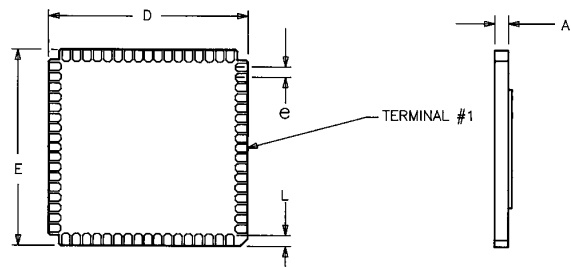
Family: Plastic Dual In-Line Package		
Symbol	Millimeters Approx *	Inches Approx *
A	6	0.3
D	59	2.3
E_1	18	0.7
e_1	1.8	0.07
L	3	0.1

*For exact dimensions consult the Packaging Handbook (#240800).





68-CERAMIC LEADLESS CHIP CARRIER
VARIATION: B

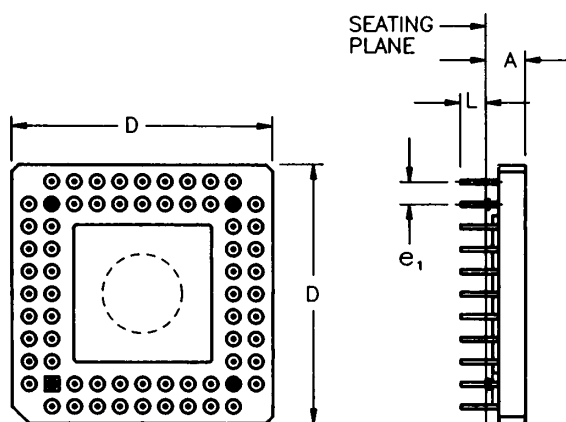


272118±7

Family: Ceramic Leadless Chip Carrier		
Symbol	Millimeters Approx *	Inches Approx *
A	3	0.1
D	25	1.0
E	25	1.0
e	1.3	0.05
L	1	0.1

*For exact dimensions consult the Packaging Handbook (#240800).

68-LEAD CERAMIC PIN GRID ARRAY PACKAGE



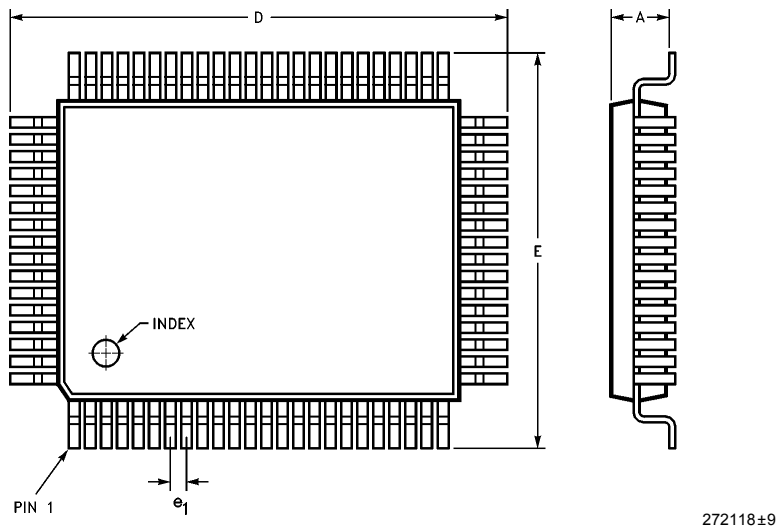
272118±8

Family: Ceramic Pin Grid Array Package		
Symbol	Millimeters Approx *	Inches Approx *
A	5	0.2
D	30	1.2
e ₁	2.5	0.1
L	2	0.1

*For exact dimensions consult the Packaging Handbook (#240800).



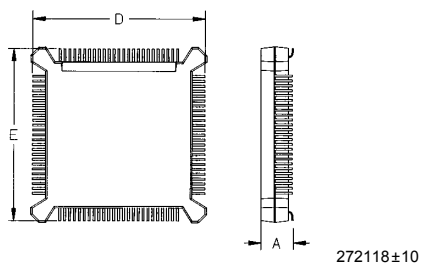
80-LEAD QUAD FLATPACK PACKAGE
VARIATION: RECTANGULAR



Family: Quad Flatpack Package	
Symbol	Millimeters Approx *
A	3
D	25
E	19
e ₁	0.8

*For exact dimensions consult the Packaging Handbook (#240800).

100-LEAD PLASTIC QUAD FLATPACK PACKAGE

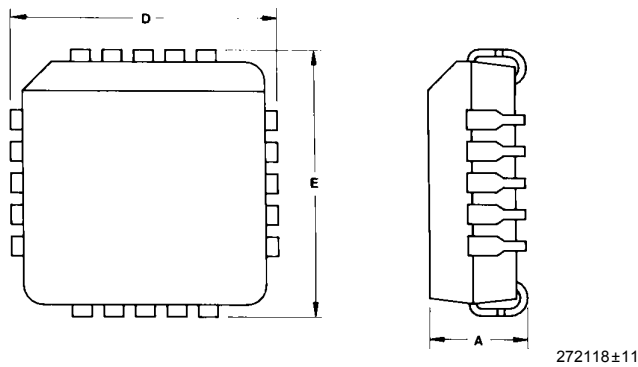


Family: Plastic Quad Flatpack (0.025 Inch (0.635mm) Pitch)			
Symbol	Description	Inches Approx *	Millimeters Approx *
A	Package Height	0.2	5
D, E	Terminal Dimension	0.9	23

*For exact dimensions consult the Packaging Handbook (#240800).



44/52/68/84-LEAD PLASTIC LEADED CHIP CARRIER



Family: Plastic Leaded Chip Carrier-Square		
Symbol	44-Lead	
	Millimeters Approx *	Inches Approx *
A	5	0.2
D	18	0.7
E	18	0.7

Family: Plastic Leaded Chip Carrier-Square						
Symbol	Millimeters Approx *			Inches Approx *		
	68-Lead	52-Lead	84-Lead	68-Lead	52-Lead	84-Lead
A	5	5	5	0.2	0.2	0.2
D	26	21	31	1.0	0.8	1.2
E	26	21	31	1.0	0.8	1.2

*For exact dimensions consult the Packaging Handbook (#240800).

