

MCS®-51 and MCS®-96 Packaging Information

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MCS-51 and MCS-96 Packaging Information

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MCS-51 AND MCS-96 PACKAGING INFORMATION

Intel Product Identification Codes

Up to 15 Alphanumeric Characters for Device Types

Up to 6 Alphanumeric Characters to Show Customer Specific Requirements

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 $+85^{\circ}$ C) express product with 160 \pm 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°C) express product without burn-in.

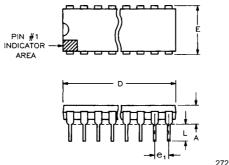
272118-12

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

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40-LEAD PLASTIC DUAL IN-LINE PACKAGE



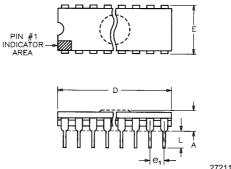
Family: Plastic Dual In-Line Package		
Symbol Millimeters Approx * Inches Approx *		
Α	5	0.2
D	53	2.1
E	16	0.6
e ₁	2.5	0.10
L	3	0.1

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



MCS-51 AND MCS-96 PACKAGING INFORMATION

40-LEAD CERDIP DUAL IN-LINE PACKAGE

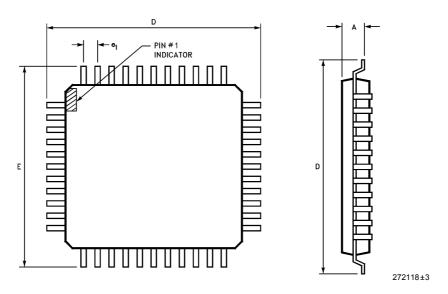


Family: Cerdip Dual In-Line Package		
Symbol	Millimeters Approx *	Inches Approx *
А	5.8	0.2
D	53	2.1
E	16	0.6
e ₁	2.5	0.10
L	3	0.1

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



44-LEAD QUAD FLATPACK PACKAGE VARIATION: SQUARE



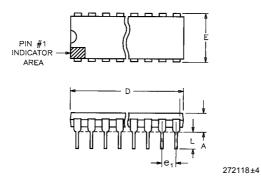
Family: Quad Flatpack Package		
Symbol Millimeters Approx *		
A	3	
D	13	
E	13	
e ₁	0.8	

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



MCS-51 AND MCS-96 PACKAGING INFORMATION

48-LEAD PLASTIC DUAL IN-LINE PACKAGE

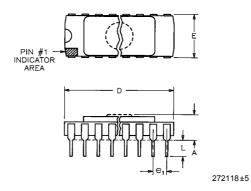


Family: Plastic Dual In-Line Package		
Symbol	Millimeters Approx *	Inches Approx *
Α	5	0.2
D	62	2.5
E	16	0.6
e ₁	2.5	0.1
L	3	0.1

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



48-LEAD CERAMIC DUAL IN-LINE PACKAGE

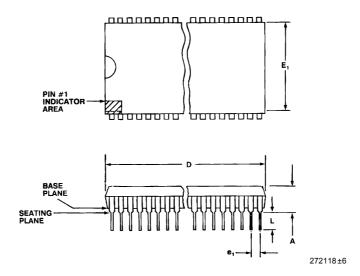


Family: Ceramic Side Braze Dual In-Line		
Symbol	Millimeters Approx *	Inches Approx *
А	6(1)	0.2(1)
А	7(2)	0.3(2)
D	62	2.5
E	16	0.6
e ₁	2.5	0.1
L	3	0.1

NOTES:

^{1.} Solid LID 2. EPROM LID *For exact dimensions consult the Packaging Handbook (#240800).

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



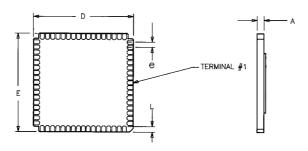
Family: Plastic Dual In-Line Package		
Symbol	Millimeters Approx *	Inches Approx *
Α	6	0.3
D	59	2.3
E ₁	18	0.7
e ₁	1.8	0.07
L	3	0.1

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

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68-CERAMIC LEADLESS CHIP CARRIER VARIATION: B

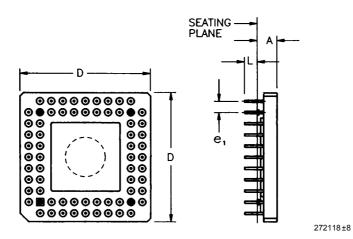


Family: Ceramic Leadless Chip Carrier		
Symbol Millimeters Approx * Inches Approx		
Α	3	0.1
D	25	1.0
E	25	1.0
е	1.3	0.05
L	1	0.1

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



68-LEAD CERAMIC PIN GRID ARRAY PACKAGE

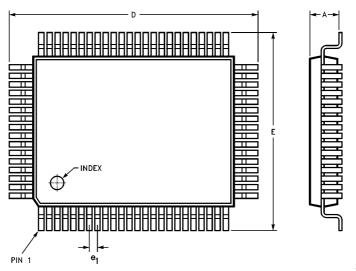


Family: Ceramic Pin Grid Array Package		
Symbol Millimeters Approx * Inches Approx *		
Α	5	0.2
D	30	1.2
e ₁	2.5	0.1
L	2	0.1

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



80-LEAD QUAD FLATPACK PACKAGE VARIATION: RECTANGULAR

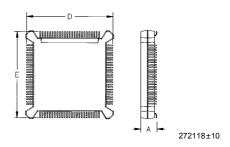


Family: Quad Flatpack Package		
Symbol	Millimeters Approx *	
A	3	
D	25	
E	19	
e ₁	0.8	

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



100-LEAD PLASTIC QUAD FLATPACK PACKAGE

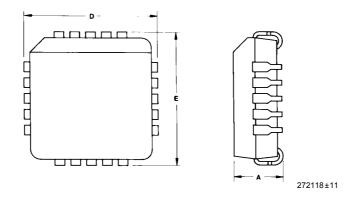


Family: Plastic Quad Flatpack (0.025 Inch (0.635mm) Pitch)			
Symbol	Description	Inches Approx *	Millimeters Approx *
Α	Package Height	0.2	5
D, E	Terminal Dimension	0.9	23

^{*}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		
- Cymbol	Millimeters Approx *	Inches Approx *
Α	5	0.2
D	18	0.7
Е	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
Α	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).

