

JEDEC DESIGN STANDARD

DESIGN REQUIREMENTS FOR OUTLINES OF
SOLID STATE AND RELATED PRODUCTS

JEDEC STANDARD

NO. 95-1

SECTION 16

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PLASTIC ULTRA-THIN SMALL OUTLINE NO-LEAD
PACKAGE
(JESD-30 DESIGNATOR R-PDSO-N/USON)

JEDEC

SOLID STATE PRODUCTS ENGINEERING COUNCIL

16. PLASTIC ULTRA-THIN SMALL OUTLINE NO-LEAD PACKAGE(USON)

16.1 ILLUSTRATION

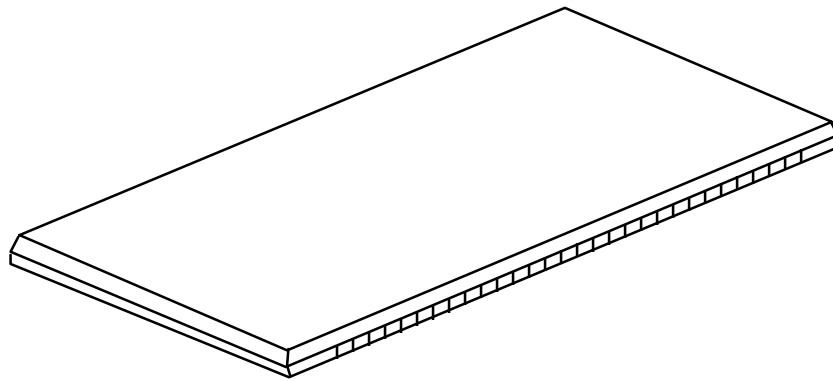


Figure 16-1

PLASTIC ULTRA-THIN SMALL OUTLINE NO-LEAD PACKAGE (USON)

16.2 Plastic Ultra-Thin Small Outline No-Lead Package (USON).

The Plastic Ultra-Thin Small Outline No-lead Package(USON) is a rectangular semiconductor package with metal terminals along two sides of the bottom of the package. The terminals are either flush with bottom or protruding slightly below bottom of package. The main body of the component is generally a molded plastic.

16.3 Concept

This Design Guide defines the symbology, definitions, algorithms, recommended dimensions and tolerances for a family of USON devices. The guidelines defined are based on hard metric dimensions and adhere to the geometric dimensioning and tolerancing principles defined in ASME Y14.5M-1994.

16.4 Recommended Outline

Refer to Figures 16-2 through 16-4 for the recommended outline format and symbology for a USON package.

16.5 Recommended Values and tolerances

The following Table of Symbols defines the recommended Symbology to be used on the USON outline and provides recommended values, algorithms, dimensions and tolerances that shall be used when preparing a USON outline.

TABLE OF SYMBOLS, RECOMMENDED VALUES AND TOLERANCES FOR
PLASTIC ULTRA-THIN SMALL OUTLINE NO-LEAD PACKAGE

SYMBOL	DEFINITION	e	MIN	NOM	MAX	NOTES
A	Overall component height measured from Seating Plane, Datum C.				0.90	
A1	The vertical distance from the seating plane datum C to the lowest point on the bottomside of the body		0.00		0.05	
A2	The thickness of the body measured from the highest point on the top surface to the lowest point on the bottom surface.		0.65	0.75	0.85	
b	The width of the terminal, including terminal finish which is external to the body	1.25 1.00 0.80 0.65 0.50	0.55 0.55 0.35 0.30 0.25		0.70 0.70 0.50 0.45 0.40	The terminal width is measured in the surface mount region of the terminal between 0.10 and 0.25mm from the terminal tip.
b1	The width of the base metal (unfinished) terminal which is external to the body	1.25 1.00 0.80 0.65 0.50	0.55 0.55 0.35 0.30 0.25	0.60 0.60 0.40 0.35 0.30	0.65 0.65 0.45 0.40 0.35	The base metal terminal width is measured in the surface mount region of the terminal between 0.10 and 0.25mm from the terminal tip.
D	The length of the plastic body measured at the outermost extremes of the body	D = 7.0, 8.0, 9.0 26.0 (See Symbol N Table)				Dimension D does not include mold flash, tie bar or gate burrs but does include top and bottom mismatch.