

STANDARD PROCEDURES AND PRACTICES

Number: **SPP-019, Issue A**

Subject: **Measuring Stand-off Heights of Packages**

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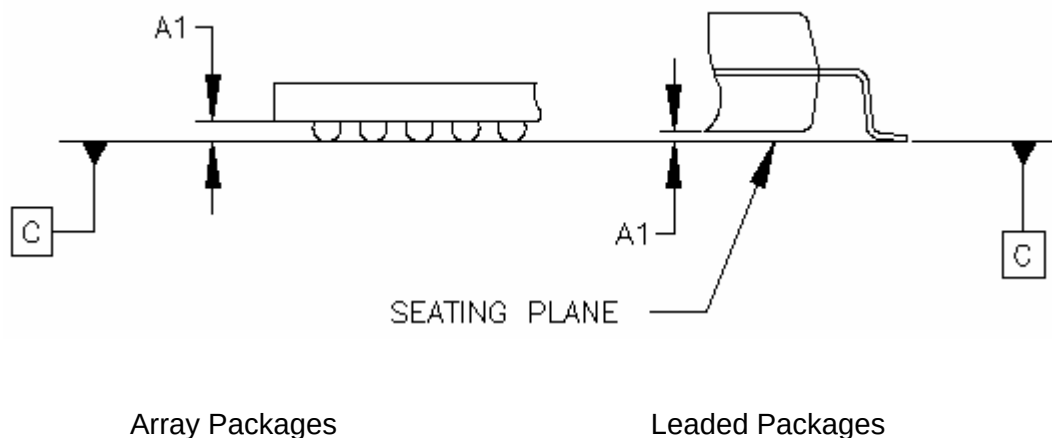
Item # **11.2-595(S)**

BACKGROUND

Users have found it necessary to clarify JEDEC Registrations and Standard Outlines regarding the measuring of the standoff heights. Many of the JEDEC Outlines have had a note added to them clarifying the measurement of this dimension. This SPP is needed to help clarify the measurement of this dimension for older package outlines that do not currently have this note.

PRACTICE

All JEDEC Registration and Standard Outlines shall use this method for measuring standoff height.



- A1 is normally the designator for the package outline standoff height as shown in the examples above.
- The standoff height numerical value shall be shown in the package outline dimension table in one of the following ways: minimum only, minimum and maximum or a minimum, nominal, and maximum.
- A1 is defined as the distance from the Seating Plane to the *Lowest point* on the package body and should always be measure using this definition. The most common mistake made in this measurement is to measure from the seating plane to *any point* on the package body, which is incorrect.

If the package registration or standard variations have a cavity down lid surface or a thermal pad extending below the package body, an additional standoff dimension will be present. In this case two separate standoff measurements would be made, seating plane to the *lowest point* of the package body and seating plane to the *lowest point* of the lid surface or thermal pad.

