

JEDEC DESIGN STANDARD

**DESIGN REQUIREMENTS FOR OUTLINES OF
SOLID STATE AND RELATED PRODUCTS**

JEDEC PUBLICATION 95

DESIGN GUIDE 4.10
Generic
Shipping & Handling
Matrix Tray

JEDEC
SOLID STATE TECHNOLOGY ASSOCIATION

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GENERIC SHIPPING & HANDLING MATRIX TRAY DESIGN REQUIREMENTS

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4.10 Generic Shipping and Handling Matrix Tray

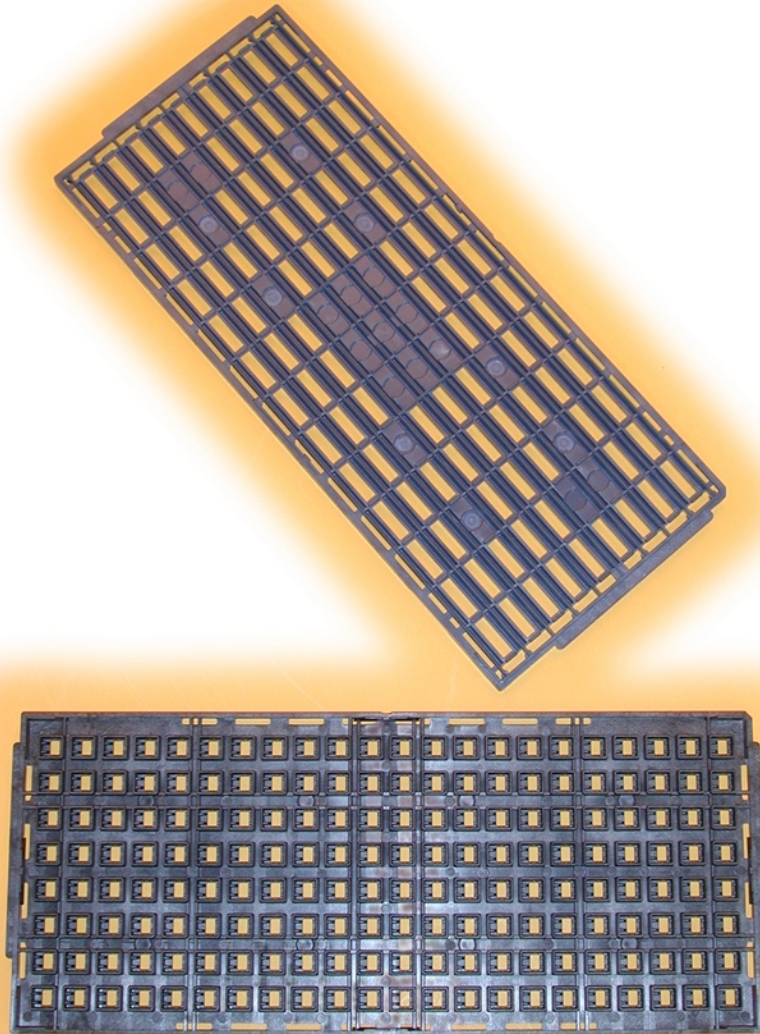


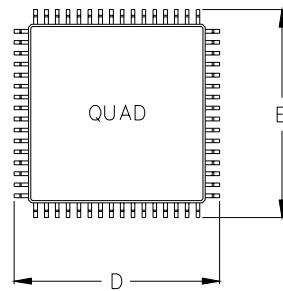
FIGURE 4.10-1
Generic Shipping and Handling Matrix Tray

4.10.1. Device Types

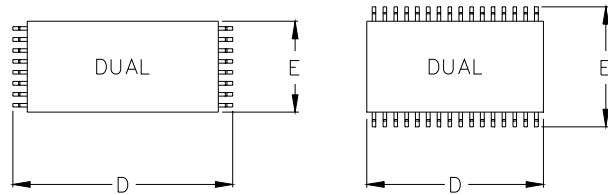
The information in this section is intended for reference only. Package types shown are not intended in any way to limit types of present or future designs, which may require matrix trays.

4.10.1.1. Leaded Packages

QUAD SIDED PACKAGE

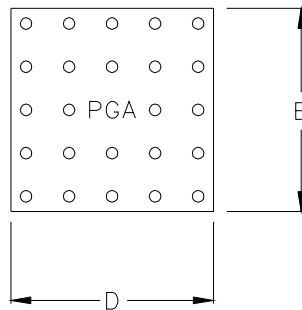


DUAL SIDED PACKAGE

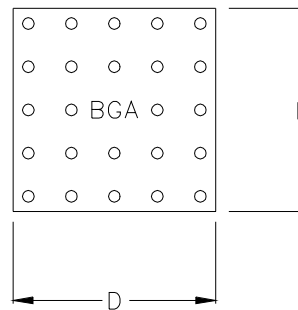


4.10.1.2. Grid Array Packages

PGA PACKAGE



BGA PACKAGE



4.10.1.3. D & E dimensions represent the largest overall features of a package (lead tip or body).

4.10.2. Tray Design

4.10.2.1. Tray Pocket Density

All new tray proposals should be maximized for the number of pockets in each tray family variation without violating the pocket density design rules specified in 10.2.3.

4.10.2.2. Rectangular Device Orientation

When designing a tray for a rectangular package, the longest dimension (D) of the package is oriented parallel to the longest length of the tray to maximize tray pocket density.