

VTX-22 TEXTURED DEVICE CARRIER

Product Datasheet

Gel-Pak's 2" x 2" VTX Tray is a textured, pocketless device carrier based on our proprietary Vertec® elastomer. The tray is designed to secure ultra-small semiconductor components during shipping and handling.

- Safely immobilizes semiconductor devices down to 50um
- Comprised of 2" molded tray with textured non-silicone elastomer.
- Devices can be easily handled manually or with automated pick-and-place equipment.
- Ideal for high volume applications.



PROPERTIES	
Part Number System	VTX-W-22-500C-L VTX-W-22-500CC-00B-L VTX-W-22-500CC-STK25-L (Black background - Optional)
Polymer Material	Vertec Non-Silicone Textured Elastomer (FDA and USP Approved)
Tray / Lid Material	Conductive Polycarbonate
Useable Area	40mm x 40mm
Compatible Device Size (X,Y)	Low Tack: 100μm to ~1mm, Thickness <200um
Surface "Tack"	Low (L)
Surface Resistance	>E12ohms
Storage Temperature	-10 to +50° C
Printed Grids	Available upon request
Unique Features	Silicone Free. Vacuum not required on backside of tray.
Recyclable	<u> </u>
Shelf Life	2 years minimum

Notes:

- 1. These values are for reference purposes only and are not intended for use in preparing specifications.
- 2. Extended temperature ranges are possible; however, testing may be needed.

VTX-22 Usage General Guidelines

Recommended Device Loading Method

• Once the devices are placed on the VTX tray, it reaches 80% of its tack strength within 1 hour and achieves full tack after 6 hours. The trays can be subjected to standard shock and vibration in Pick-and-Place (PnP) handling or packaging immediately upon placing. However, more rigorous drop testing should ideally be conducted after 1 hour, and preferably after 6 hours, to ensure optimal tack performance.

Recommended Device pick Method

- The vacuum pickup tip should reach a minimum of 20 inches of Hg (4.7psia) before initiating pickup. This typically takes less than 100ms for most commercial P&P tools.
- Pickup speed should be between 1mm/sec to 3mm/sec until the device separates from the VTX surface. Time to achieve this displacement usually takes less than 100ms, beyond which the pickup tip can move at any desired speed.
- If picking is not successful, optimize the process by adjusting a) pickup tip downforce, b) pickup tip vacuum, c) and/or pickup speed