HSP Product Info:
Bulk Component Feeder
Mechanically Actuated

FEATURES & BENEFITS

- Simple, yet highly reliable belt transfer system moves components to the pick area without tumbling, reducing incidence of component damage
- Operates like a tape feeder, eliminating the need for machine modification or special setups
- Increases on line component capacity at each feeder position (example: ~45,000 0603C components per feeder)
- Feeders are designed to maintain 0.1 second placement rate, keeping pace with tape feeders

The Bulk Component Feeder greatly improves machine uptime by increasing on-line component capacity

After several years in exile, the concept of bulk feeding passive components is beginning to make a comeback on the circuit board assembly floor. Thanks to an unprecedented cooperative effort between component manufacturers and placement equipment suppliers, issues of component geometry and fabrication have been addressed.

New and exciting component feeding innovations are driving placement rates and reliabilities well beyond the range limits that previously made bulk feeding an interesting, yet inefficient technique.

The Bulk Component Feeder from Universal Instruments is based on a simple, yet stable design that consistently delivers pick reliability that is equal to, if not better than that of comparable tape feeder methodologies, with the benefit of significantly increased feeder capacity.
**HSP Bulk Component Feeder**

- The HSP Bulk Component Feeder is designed with simplicity in mind. It has long been proven that the smoother the path from component hopper to pick point, the more reliable the process.
- Operating in the same fashion as a tape feeder, the Bulk Component Feeder indexes manually, without the need for pneumatic or electronic control.
- The component hopper is designed to accommodate a wide variety of bulk cassette packaging formats. Components are transferred from their original packaging to the feeder’s hopper compartment prior to use.
- To eliminate the occurrence of gaps in the component feed track, the belt moving distance per index stroke is slightly larger than the length of the driven component.
- The HSP Bulk Component Feeder can be used with all 479x series machines, without the need for machine modification.

**Specifications**

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<tbody>
<tr>
<td>Available Component Types</td>
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<tr>
<td>0402C Component Specs</td>
<td>L: 1.0 ± 0.05mm W: 0.5 ± 0.05mm T: 0.5 ± 0.05mm</td>
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<tr>
<td>0603C Component Specs</td>
<td>L: 1.6 ± 0.07mm W: 0.8 ± 0.07mm T: 0.8 ± 0.07mm</td>
</tr>
<tr>
<td>Tact Speed</td>
<td>0.10s / component</td>
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<tr>
<td>Feeder Weight</td>
<td>Approximately 850 grams</td>
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<tr>
<td>Feeder Size</td>
<td>381mm (L) x 206mm (H) [one slot - same as 8mm tape feeder]</td>
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Specifications subject to change without notice.

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**HSP Bulk Component Feeder Diagram**

During operation, feeder is indexed here

With each index, components fall down the chute onto the belt track

Components are picked and replaced by a new component in the pick location

As the feeder is indexed, components move down the track to the pick point

Spare or empty component cartridges may be stored on the feeder