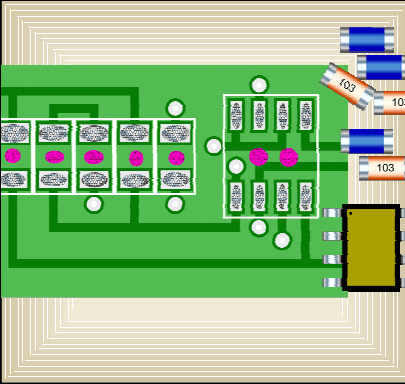


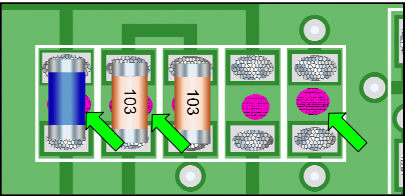
SURFACE MOUNT TECHNOLOGY (SMT)
ADHESIVE APPLICATION



ADHESIVE APPLICATION

Adhesives are frequently used to temporarily hold SMT components in position prior to soldering. Once the soldering operations are completed, the adhesive residue is removed during the cleaning process.

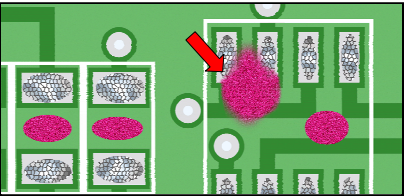
The application of adhesive should be controlled to ensure proper placement, amount, and cure. Excess adhesive, improper placement, or incomplete cure can contaminate solder paste and solderable surfaces, interfere with proper component alignment, and impact cleanability.



PREFERRED

The deposition of adhesive is consistent, properly placed, and repeatable. Dots are centered under the part body, equidistant between the land pattern areas.

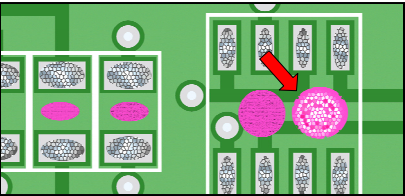
[NASA-STD-8739.2 \[8.9 \], \[8.10.2 \]](#)



UNACCEPTABLE
ADHESIVE ON LEADS / SOLDER PADS

Adhesive deposits on part leads and/or solder pads interfere with proper placement, component retention, and solderability.

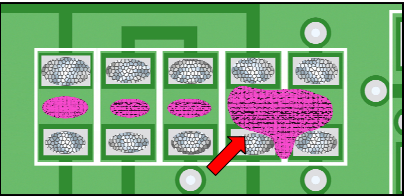
[NASA-STD-8739.2 \[8.10.3 \]](#)



UNACCEPTABLE
VOIDS

Bubbles and voids in the adhesive reduce the deposit's cross-section and retention properties.

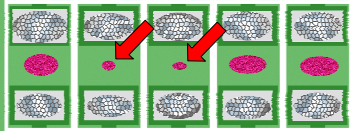
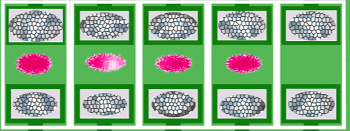
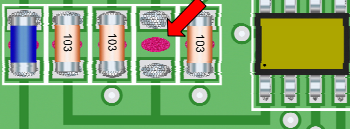
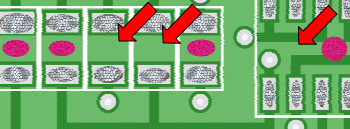
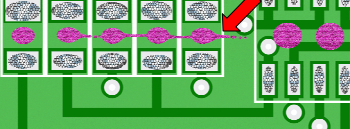

[NASA-STD-8739.2 \[8.9 \], \[8.10.1 \]](#)



UNACCEPTABLE
EXCESSIVE ADHESIVE

Excessive adhesive interferes with proper placement, component retention, and solderability.

[NASA-STD-8739.2 \[8.10.3 \]](#)

SURFACE MOUNT TECHNOLOGY (SMT) ADHESIVE APPLICATION (cont.)				
				
<p>UNACCEPTABLE INSUFFICIENT ADHESIVE</p> <p>Insufficient adhesive may result in lost and/or misaligned components, and increased rework.</p> <p>NASA-STD-8739.2 [6.15.1], [8.9]</p>	<p>UNACCEPTABLE INSUFFICIENT CURE</p> <p>Insufficiently cured adhesive may result in lost and/or misaligned components, and increased rework.</p> <p>NASA-STD-8739.2 [8.9]</p>			
				
<p>UNACCEPTABLE LOST COMPONENTS</p> <p>Evidence of lost components indicates a process control problem (excessive / insufficient adhesive, insufficient cure, etc.).</p> <p>NASA-STD-8739.2 [6.15.4]</p>	<p>UNACCEPTABLE SKIPPING</p> <p>Skipping is an indicator of a process control problem, and may result in lost components and increased rework.</p> <p>NASA-STD-8739.2 [8.9]</p>			
				
<p>UNACCEPTABLE STRINGING</p> <p>Stringing is an indicator of a process control problem, is a contaminant, and affects overall solderability.</p> <p>NASA-STD-8739.2 [6.15.1]</p>				
NASA WORKMANSHIP STANDARDS				
	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION JOHNSON SPACE CENTER HOUSTON, TEXAS USA 77058	Released: 06.27.2002	Revision:	Revision Date:
		Book: 7	Section: 7.03	Page: 2