

PRODUCTS—JTCAB Foil

Designed To Increase Mechanical And Chemical Adhesion

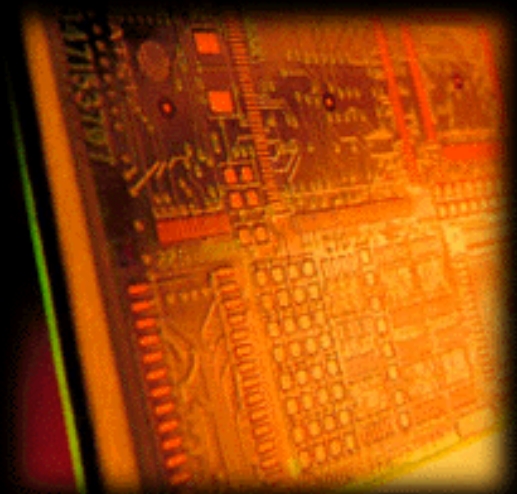
1. higher profile and higher nodularization increase mechanical adhesion
2. specialty silanes on foil increase chemical bonding to high performance resin systems

Hi-Performance JTC (Grade 1) and JTCS (Grade 3) foils are specially treated to bond to high performance, high Tg resin systems. When compared with standard JTC foil, Hi-Performance JTC is manufactured with higher base foil profile and more nodularization, both designed to increase mechanical adhesion and peel strength. Hi-Performance JTC and JTCS products are also treated with a silane tailored to react with and chemically bond to high Tg resin system such as polyimide, BT, polyester, and cyanate ester. The silane not only increases peel strength but enhances copper-to-resin adhesion and PWB reliability.

JTC (Grade 1) and JTCS (Grade 3) Advanced Bond foils are offered for laminates made with pure, non-MDA polyimide resins. JTCS Advance Bond foils are treated with a special silane that bonds with non-MDA polyimide resin, thereby increasing peel strength.

Matte Side Profiles

Hi-Performance copper foils are available in a variety of widths and thicknesses ranging from 12 micron (3/8 oz.) to 350 micron (10 oz.) Double treated versions of Hi-Performance foils are manufactured in thicknesses of 18 micron to a maximum of 140 micron and 70 micron respectively, for JTC and JTCS types. Advanced Bond™ and Advanced Bond DT (doubletreat) foils are provided in thicknesses of 18, 35, and 70 microns. Below is a listing of typical peel improvements obtained with Hi-Performance foils when laminated to various specialty resin systems.



Typical Peel Strength (lb./in.) Using 35 μ m (1 oz.) Foil

Resin System	JTC Grade 1	Hi-Performance JTC Grade 1
Polyimide	7.5	9.0
Polyester	6.0	8.0
BT	8.0	11.5
Cyanate Ester	6.5	8.5

Benefits

1. **Higher Peel Strength**—Hi-Performance foils are designed to increase mechanical and chemical adhesion to a variety of specialty resin systems, especially high Tg types.
2. **Improved Laminate and PWB Reliability**—Silane chemically bonds copper foil to resin systems, thereby, increasing resistance to delamination and pad lifting.
 - o Higher profile and higher nodularization increases mechanical adhesion.
 - o Specialty silanes on Advanced Bond foil increases chemical bonding and peel strength on laminates made with non-MDA polyimide resin

For information about other Foil Division products, please select the appropriate product in the box below and press "go".

