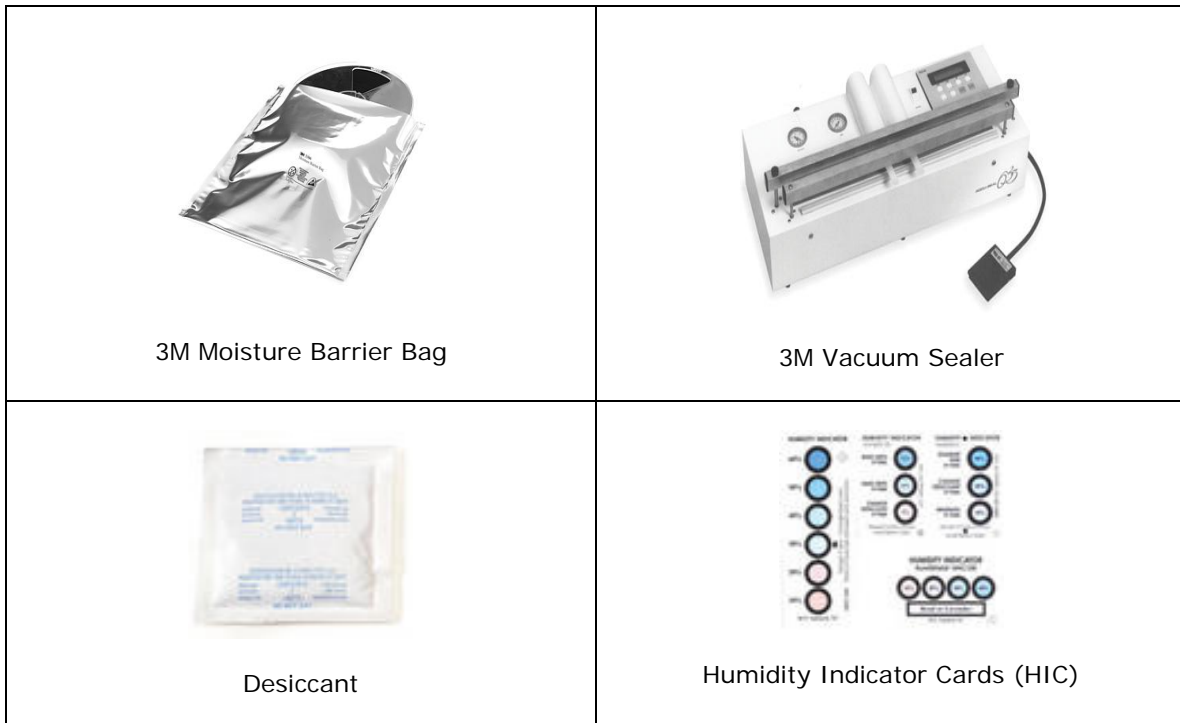


BGA's & SMD's Need A Moisture Barrier Bag



This message is directed to Prime's BGA users, and really any SMD component users.

We have been made aware that many who purchase sockets for testing BGA's or SMD devices may be using the wrong type of protective bag in the transport process. Anyone who processes devices in an oven, or uses devices that have been baked in an oven, will need a moisture barrier bag and desiccants or HIC cards in the transporting of the devices or PC boards. Why is that? The reason is, that it is important to keep Surface Mount Devices dry between the time of manufacturer and the point of reflow-soldering. Moisture barrier bags are also known as vapor barrier bags.

Vapor barrier bags are made from multiple layers of plastic and aluminum that control moisture vapor leakage. These bags are *not* moisture vapor proof, nor do they remove moisture. Over time moisture vapor will leak into the bag. This is why desiccant is put into the bag to reduce humidity and scavenge moisture that penetrates the bag. A humidity indicator card (HIC) may also be put into the bag to indicate the relative humidity with moisture-sensitive, color-changing chemical spots. This will provide assurance to the user of the bag that the devices are dry when received. It is vital that the bag is free from pinholes and voids in the side seams, and this leads to the need for conducting a bag integrity test. Finally, the bag must be strong enough to resist puncture from trays or reels of devices. After the device or board has been placed in the bag along with the HIC or desiccant, a vacuum sealer evacuates moisture-laden air from moisture barrier bags and then heat seals the bags closed. This is part of the dry packaging process that is designed to protect surface mount devices from moisture.

Need more information? Send an email to me, with your request.

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