Chapter 8 Precautions for Storage and Transportation

This chapter describes the precautions for storage and transportation.

1. Storage

(a) It is desirable that devices be stored in a place of normal temperature and humidity. Temperature and humidity are approximately 5 to 35℃ and 45 to 75%, respectively. When storing molded type power transistors in area that becomes extremely dry in winter, humidification by a humidifier is required. If tap water is used for humidification, chlorine contained in it may cause corrosion of the terminals of the device. To prevent this, use pure water or boiled water for humidification.
(b) Avoid storing devices in a place where corrosive gas is generated or subjected to much dust.
(c) Avoid storing devices in a place subjected to sharp temperature change. Otherwise condensation may occur to the devices. Store the devices in a place having min. temperature change.
(d) Pay attention not to apply load to devices during storage. In particular, if they are stored stacked on top of each other, unexpected load may be applied. Also, avoid placing heavy objects on top.
(e) Store the devices with each terminal unprocessed to avoid occurrence of corrosion, which may result in soldering defect at the time of processing.
(f) Store the devices in containers that is not affected by static electricity easily, or the one used for the delivery of the product.
(g) All storage shelves should be made of metal. Be sure to ground them.

2. Transportation

(a) Be careful not to cause impact on the devices such as dropping them, etc.
(b) When transporting large number of devices in boxes, arrange the devices by using soft spacers to prevent the contact electrode surface, etc. from being damaged.
(c) Take measures against static electricity by using conductive bags or aluminum foil to prevent static electricity being applied to G-E terminals.

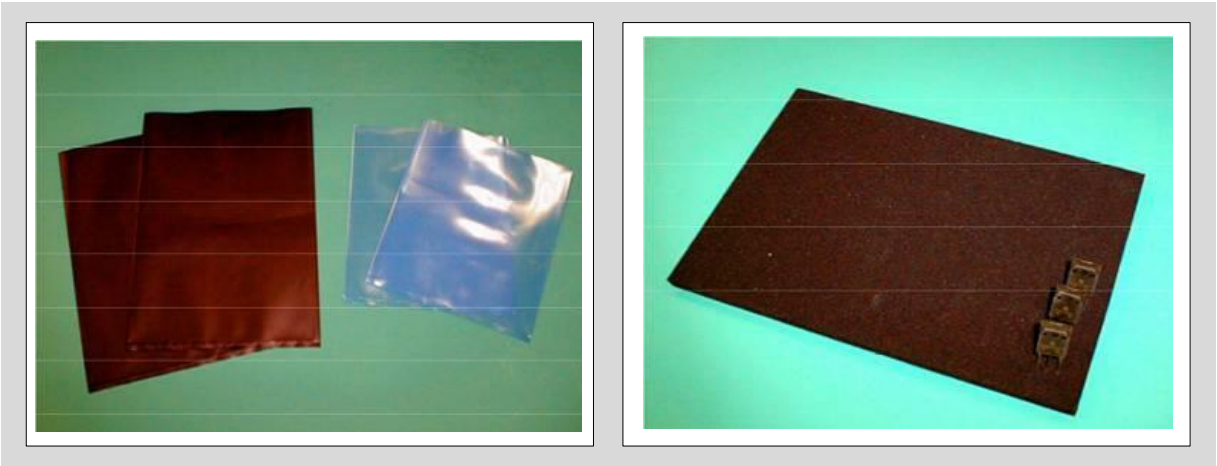

Fig.8-1 Conductive bag (left) and conductive foam (right)

3. Working Environment

(a) The person who handles the IGBT should use ground their body. Wear a wrist strap, copper ring, etc., attach a resistor of approximately 1MΩ, and ground it to prevent electric shock.
(b) At the working environment, lay a conductive floor mat or tablemat, etc. and ground it.
(c) When using measuring devices such as curve tracer, ground the measuring devices as well.
(d) When soldering, ground the solder bath to prevent the leakage voltage from the soldering iron or bath being applied to the IGBT.
(e) Hold the package body so that you do not touch the terminals directly.