

3M™ Dri-Shield Moisture Barrier Bag 3000

Sizes on Page 2

Moisture Barrier Bag ~ Foil

3M's Dri-Shield 3000 Moisture Barrier Bag is designed to meet the requirements of IPC/JEDEC J-STD-033 for the dry packaging of electronic devices. Dri-Shield 3000 bags are made from dissipative nylon, foil, and dissipative polyethylene. These bags protect SMD's from moisture and static damage. Flexible structure is easy to vacuum seal. Coded for QC traceability.

Standards

Meets electrical and physical requirements of IPC/JEDEC J-STD-033, MIL-PRF-81705 Type 1, EIA 583, EIA 541, EIA 625, and EOS/ESD Standards.

Specifications

Physical Properties:

MVTR(g/100 sq.in./24 hrs)
Puncture Resistance
Thickness
Tensile Strength
Seam Strength
Heat Sealing Conditions:
Temperature
Time
Pressure

Typical Values

<.0003
17 lbs
6.1 mils
>4500 psi
Pass
300°F - 400°F
0.6 - 4.5 seconds
30 - 70 PSI

ASTM F 1249
FTMS 101 MTH 2065
3M 008
ASTM D882
MIL-PRF-81705

Electrical Properties:

Surface Resistivity / Resistance
Interior
Exterior
Metal
Static Shielding
Static Shielding
EMI Attenuation
Static Decay
Non-Corrosive
Outgassing

ASTM D257
<10¹² ohms/square
<10¹² ohms/square
100 ohms
< 15 volts
< 10 nJ
45 dB
< 0.03 seconds
Pass
Pass

or ANSI/ESD STM11.11
or <10¹¹ ohms
or <10¹¹ ohms

EIA 541
EOS/ESD S11.31
MIL-PRF-81705
FTMS 101 MTH 4046
FTMS 101 MTH 3005
ASTM E595



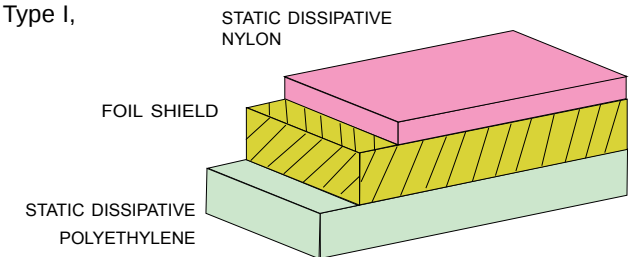
3M™ Dri-Shield 3000 Bag

3M™ Moisture Barrier Bag with
3M™ Humidity Indicator Card and
3M™ Desiccant



Material Structure

6.1 mils of static dissipative nylon, aluminum foil, and static dissipative polyethylene provide a very low MVTR. This foil barrier material meets or exceeds the MVTR and EMI/RFI/Static Shielding requirements of IPC/JEDEC J-STD-033 MIL-PRF-81705 Type I, and EIA 583, for static safe, moisture barrier packaging



See 3M Data Sheets for these related items:

Humidity Indicator Cards (HIC's)

Desiccant

113 Label

Vacuum Sealers

P R O D U C T D A T A S H E E T

Dri-Shield 3000 Moisture Barrier Bag FOIL

PRODUCT

MOISTURE BARRIER BAG, FOIL

ITEM NUMBER

D30(W")(L")

DATASHEET

1104-B

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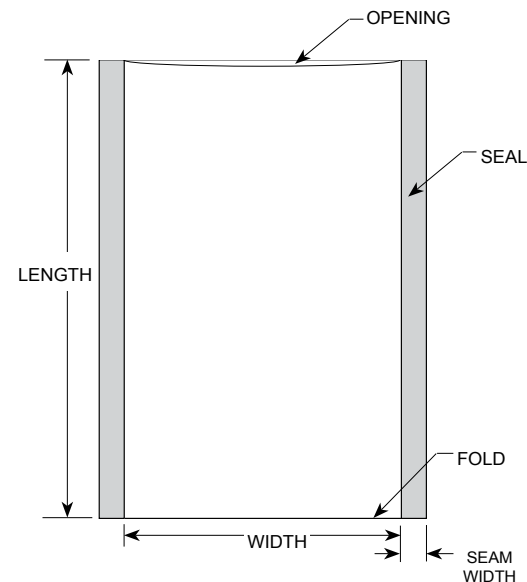
3M™ Dri-Shield Moisture Barrier Bag 3000

Moisture Barrier Bag ~ Foil

W"x L" P/N
10 x 20 D301020
10 x 30 D301030
16 x 18 D301618

- All standard sizes in-stock/same day shipment.
- Width is measured from inside seam to inside seam.
- Length is measured from the top edge to the bottom fold.
- Opening is in the "width" dimension.
- Custom bag sizes, custom printing, and custom hot stamping are available.
- Most sizes are packed 100 per case.
Small sizes are packed 1000 or 500 per case.

3M™ Dri-Shield 3000 Bag



How Moisture Barrier Bags Work

Moisture barrier bags work by enclosing a device with a metal or plastic shield(s) that have a high resistance to moisture vapor permeation. Dry devices are placed inside this shield, and the moisture-laden air is evacuated. Desiccant filled pouches scavenge the remaining moisture from the bag's interior. Moisture that penetrates the bag is also entrapped by the desiccant. Humidity indicating cards report the effectiveness of the package upon device use. A label on the bag indicates the amount of exposure time devices are allowed prior to use, and the drying (re-baking) time and temperature if the exposure time is exceeded.

As the barrier property improves, the Moisture Vapor Transmission Rate (MVTR) decreases. Bags with lower MVTR provide better barrier. Aluminum foil provides the best MVTR of about 0.0003. Multiple layers of Foil Polyester can provide 0.02 to about 0.005.

Puncture Resistance is an important feature for barrier bags. Sharp tray edges may tear through bags with low puncture resistance.

P R O D U C T D A T A S H E E T

Dri-Shield 3000 Static Shielding Bag METAL-IN

PRODUCT	ITEM NUMBER	DATASHEET
MOISTURE BARRIER BAG, FOIL	D30(W")(L")	1104-B

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