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## ONE PART IN PLASTIC BAG WITHIN A BOX

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### 1.0 SCOPE

This standard provides a method for the individual packaging of an item in a transparent, flexible, plastic bag (static protective material, when applicable) within a box. Bag closure shall be heat seal, pressed closure, taping. Stapling is not permitted for electronic items.

### 2.0 REFERENCES

- 2.1 LPS 40-001, LMSSC Packaging Standard, "General Requirements Specification"
- 2.2 P-201, LMSSC Packaging Standard, "Thermal Control Surfaces" Label
- 2.3 LAC 3250, LMSSC Specification, "Protection of Electrostatic Susceptible ESDS Parts and Assemblies"
- 2.4 WS 25984, Requirements for Electrostatic Discharge (ESD) Protective Caps for Trident II (D5)

### 3.0 REQUIREMENTS

#### 3.1 GENERAL

- 3.1.1 The requirements of LPS 40-001 shall be met in addition to provisions of this Packaging Standard.
- 3.1.2 The quantity per unit package shall be one (1) each.
- 3.1.3 Any loose item(s) required per part shall be enclosed in a separate plastic bag or vial and placed within the item bag.
- 3.1.4 Exposed silver or silver-plated parts shall be protected with tarnish-inhibitor material. Minimum surface area of the tarnish inhibitor shall be twice the area of the silver surface of the item.

**NOTE:** The treated side of the inhibitor material must be facing the item.

**CAUTION:** ITEMS HAVING ANY SURFACES INCOMPATIBLE WITH THE TARNISH INHIBITOR SHALL BE COMPLETELY WRAPPED WITH A NEUTRAL MATERIAL PRIOR TO APPLICATION.

- 3.1.5 Tarnish inhibitor may be adjacent to but shall not be allowed to come in contact with chemically finished surfaces such as anodize, iridite, chromate coatings and other nonferrous metals (e.g., cadmium, copper and brass).
- 3.1.6 Assemblies, parts and components identified in the procurement document, specification, or drawing, as being susceptible to damage by electrostatic discharge shall be packaged in bags fabricated from material conforming to the following requirements: Suppliers shall preserve and pack ESD hardware in accordance with requirements established in the Purchase Order, Statement of Work (SOW), Product Specification or Engineering Drawing. LMSSC facilities shall preserve and pack ESD hardware in accordance with 2.4.2-T1-SpecEng-6.1-S, ESD Control Standard and applicable Engineering Drawing Notes. Should there be a conflict between the requirements of this packaging standard and contractual requirements, the Contract shall take precedence.
- 3.1.7 Protect all exposed or projecting pins, contacts, fittings, etc., with proper size type and style of protective caps (conductive when required), plugs, closures (see Paragraph 5.1.2).

**CAUTION:** USE ONLY STATIC PROTECTIVE CAPS OR COVERS ON STATIC SENSITIVE ASSEMBLIES.

#### 3.2 UNIT PACKAGING (See Figure 1)

- 3.2.1 Place item in a transparent plastic bag, include tarnish inhibitor and bag or lid as applicable (Ref Paragraphs 3.1.3 and 3.1.6). Close bag by heat sealing, press seal, or taping. Allow sufficient material to permit at least one additional reseal.

**CAUTION:** IF ITEM IS STATIC SENSITIVE COMPLY WITH PARAGRAPH 3.1.6 AND APPLY WARNING LABEL (Figure 2).

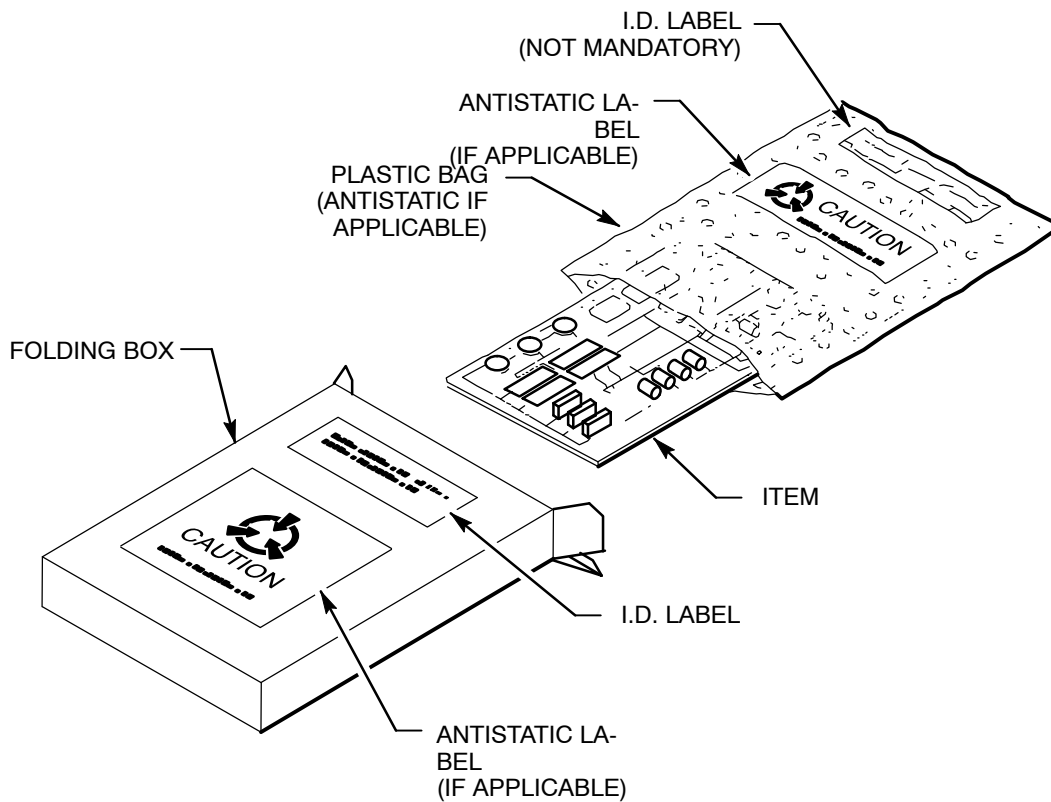


Figure 1. Unit Package – Bag within Box

P30015-001

3.2.1.1 . Overpack each bagged item into a folding setup or corrugated container. Fill voids with suitable cushioning/dunnage.

**3.3 INTERMEDIATE PACKAGING – (Consolidation of Unit Packages)**

3.3.1 Pack unit packages containing identical items uniformly into paperboard/fiberboard containers. Gross weight/dimensions of each container shall not exceed its design specification.

3.3.2 Fill all voids with suitable dunnage, blocking or bracing to prevent damage during handling/shipment.

**3.4 PACKING**

3.4.1 Pack any number of intermediate containers uniformly into each shipping container.

3.4.2 Shipping containers as packed, shall protect each item and package during ordinary handling and shipping and shall meet the minimum requirements of the common carriers for safe transportation at the lowest rate to the point of delivery.

3.4.3 Intermediate containers which meet requirements of Paragraph 3.4.2 may be used as shipping containers.

3.4.4 Enclose or attach a copy of packing slip to the shipping container.

3.5 **MARKING** (Unless otherwise specified in the contract or Purchasing Document use the following criteria)

3.5.1 **Unit Package Marking**

Unless otherwise specified, apply pressure-sensitive label(s) to each individual package, blister segment, etc. Marking shall be clear and legible.

Label must show part number per contracting document, manufacturer's name (may be abbreviated but logo is not acceptable), and lot date code (LDC), if applicable. Additional markings may be specified in the item detail specification, drawing or purchase order.

Apply special labels if applicable, i.e., "Thermal Control" per P-201, "Protected with Tarnish Inhibitor – Do Not Open Until Ready for Use or Inspection," "Electrostatic CAUTION," etc.

3.5.2 **Electrostatic CAUTION Label**

Apply WARNING Label (Figure 2) to each unit package containing a static sensitive device.



Figure 2. Electrostatic CAUTION Label

**NOTE:** Depicted label/symbol is widely available and standard in the industry. However, the wording, size and background color may be substituted to meet delivery schedule.

3.5.3 **Intermediate Packaging Marking**

Label or mark each intermediate package in a clear and legible manner to show part number per contracting document, manufacturer's name (may be abbreviated but logo is not acceptable), and quantity within the intermediate package. Apply special labels if applicable.

3.5.4 **Shipping Container Marking**

Label or mark each container to show part number per contracting document, supplier's name, total quantity within shipping container, LMSSC contracting document number and destination.

Special precautionary and handling markings shall be applied if required.

**4.0 QUALITY ASSURANCE**

4.1 Packaging shall be accomplished in such a manner as to prevent physical damage to, or degradation of, the packaged items during delivery to the using activity. It shall be the prerogative of LMSSC to return damaged items, at supplier's expense, when such damage is attributable to improper or inadequate protection.

**5.0 NOTES**

5.1 The following information is intended as a guide or aid to suppliers in meeting the requirements of this specification:

5.1.1 **DEFINITION** – Unprotected Silver Surfaces. All metallic silver surfaces (having stringent reflectivity or conductivity requirements, close-tolerance finishes and/or dimensions, without supplementary tarnish-resistant treatment), the deterioration of which may result in premature failure or malfunction of the item or equipment having such surfaces.

5.1.2 REFERENCES

<u>Commodity</u>	<u>Military/Commercial Specifications</u>
Box, Fiberboard	ASTM D5118, Type CF, Class Domestic, SW (optional) Style RSC, Grade 44 ECT or 200 Mullen (optional)
Box, Folding Paperboard	PPP-B-566
Cushioning, Cellulosic	A-A-1898, Grade 1, Class C Style 1, Size L (optional) Kraft Backed
Cushioning, Plastic Cellular	PPP-C-795, Class 2
Cushioning, Polyurethane	MIL-PRF-26514, Type 1, Class 2, Grade B
Label, Static Caution	Commercially Available
Protective Caps	AS-90376 or NAS 831, NAS 813, NAS 820
Sheet, Plastic	A-A-3174, Type I, Class 1, Grade B
Silver Tarnish Inhibitor	Commercially Available (Must be approved by LMSSC PMP)
Fiber Box, Closing	ASTM D1974

**6.0 SPECIAL PRECAUTIONARY MEASURES**

Electrostatic sensitive items are susceptible to damage from electrostatic discharge (ESD). Users should observe the following precautions when handling these types of devices/assemblies.

- 6.1 DO NOT handle/transport items unless they are packaged in static protective unit packages/handling trays, aids, etc.
  - 6.1.1 Remove items from protective packaging only at certified grounded workstation. All equipment, tools, materials and personnel shall be static protective.