

LMSSC PACKAGING STANDARD

P-80
Revision 2
Page 1 of 4
04-15-2009

ONE PART IN HEAT-SEALED PLASTIC BAG (WITHIN A BOX DEPENDENT ON PART SIZE)

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 (when applicable).

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

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 electrical contacts, pins, connectors, etc., with proper size type and style of protective caps (conductive when required) plugs, closures, etc.

3.2 UNIT PACKAGING

- 3.2.1 Type 1 (Figure 1) – Parts with Dimensions Less Than 3 Inches. Place item in a transparent plastic bag (static protective material, when applicable). Provide tarnish inhibitor and protective caps as applicable (Ref Paragraphs 3.1.4 and 3.1.7).
 - 3.2.1.1 . Expel excess air from bag and close by heat sealing. Allow sufficient material to permit at least one additional reseal.
- 3.2.2 Type 2 (Figure 2) – Parts with Largest Dimension, 3 Inches or Greater. Package per Paragraphs 3.2.1 and 3.2.1.1 , and place each bagged item in a setup, folding or corrugated box; fill all voids with suitable nondusting dunnage material.

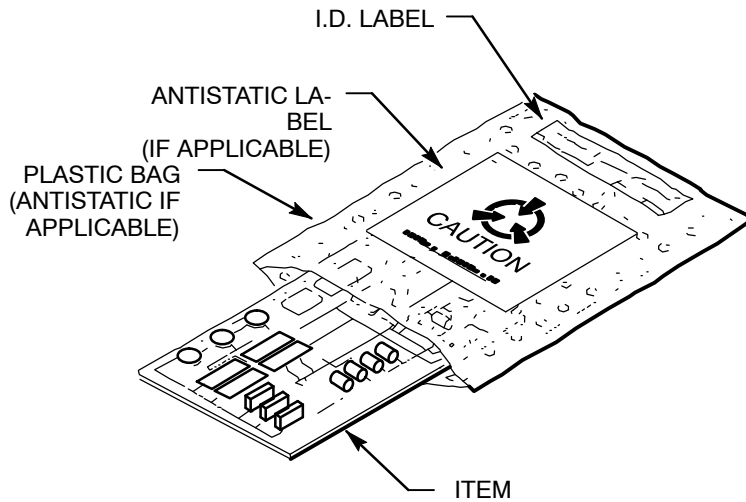


Figure 1. Type 1 Package (Bag Only)

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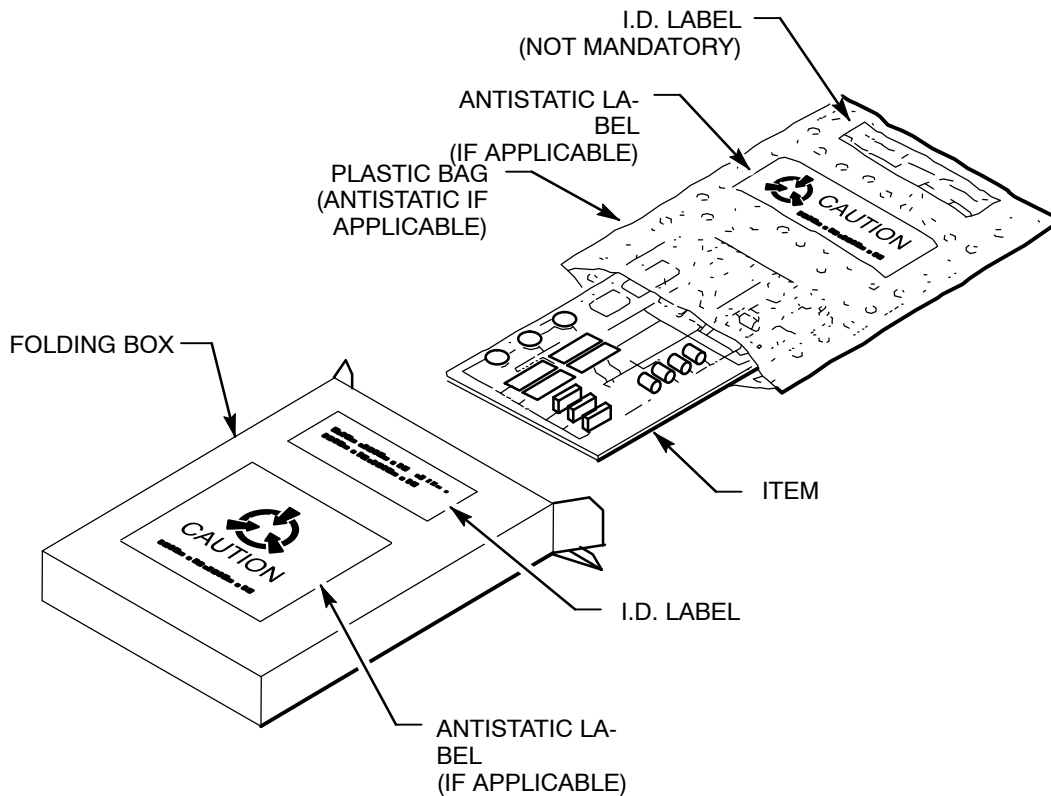


Figure 2. Type 2 Package (Bag/Box)

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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. When packing more than one lot for shipment, each lot shall be in a separate intermediate container.

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 acceptance for safe transportation at the lowest rate to the point of delivery.
- 3.4.3 Intermediate containers which meet the 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), lot date code (LDC) if applicable. Additional markings may be specified in the item detail specification, drawing or purchase order.

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

3.5.1.1 . When loose contact pins are furnished with connector(s) the unit package marking shall include the part number(s) of the contact pins.

3.5.1.2 . If specified markings are readily visible and legible on each part through the unopened unit packages, the labeling or marking requirement is waived on the unit package.

3.5.2 Electrostatic CAUTION Label

Apply WARNING label (Figure 3) to each unit package containing a static sensitive device.



Figure 3. Electrostatic CAUTION Label

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

Commodity

Military/Commercial Specifications

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
Box, Setup Paperboard	PPP-B-676
Cushioning, Cellulosic	A-A-1898, Grade 1, Class C, Style 1, Size L.(optional) Kraft Backed
Cushioning Material, Open Cell	A-A-1898, Grade 1, Class C, Style 1, Size L. Kraft Backed
Cushioning, Polyurethane	Type 1, Class 2, Grade B
Label, Static Warning	Commercially Available
Protective Caps	AS-90376 or NAS 831; NAS 813, 820
Sheet Plastic	A-A-3174, Type I, Type 1, Class 1, Grade B
Silver Tarnish Inhibitor	Commercially Available (Must be approved by LMSSC PMP)

6.0 SPECIAL PRECAUTIONARY MEASURES

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

6.1 DO NOT handle/transport items unless they are packed in static protective unit packages/handling trays.

6.1.1 Remove items from protective packaging only at certified grounded workstations. All equipment, tools, materials and personnel shall be static protective.