
SPECIAL CARRIER PACKAGE FOR INTEGRATED CIRCUITS AND SEMICONDUCTORS

1.0 SCOPE

This standard provides for the individual packaging of integrated circuits (flat-packs) or "TO" style semiconductor devices in special carriers for automated handling/testing.

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 LMSC to return damaged items, at supplier's expense, when such damage is attributable to improper or inadequate protection.

5.0 NOTES

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

- 5.1 This standard provides minimum protection of devices specified in the procurement document, during shipment from supplier to LMSC to facilitate automated test/inspection functions. Unless otherwise specified, when a conflict exists between the packaging provisions of this standard and a detail item specification/drawing referenced in a contractual document, the packaging requirements imposing a higher level of protection (long term storage, unique preservation/packaging, etc.), the requirements of the applicable specification/drawing shall take precedence.
- 5.2 **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.

6.0 REFERENCES

- 6.1 Federal Specification QQ-S-365, "Silver Plating, Electrodeposited; General Requirements for"
- 6.2 Tarnish Inhibitor Source – Daubert Chemical Co., Oakbrook, IL

7.0 UNIT CARRIER SOURCES

Carrier – Amphenol/Barnes Corporation – Broadview, IL
Wells Electronics, Inc. – South Bend, IN

8.0 UNIT PACKAGE SOURCES (FIGURE 5)

LMSC Plastic Package Design (PHE 21-1171) – Colvin Packaging Products Inc., Anaheim, CA
For-Vac, Inc., Belmont, CA
Merrill's Packaging, Inc., Burlingame, CA

Table 1						
BARNES/AMPHENOL CARRIER IDENTITY – FLAT PACK DEVICES						
Device Body Max Size (inch)	Flat Packs Accepted – 2 Piece Snap-On Clip Type					Number of Leads
	Lead Shape	Min Lead Length	Max Lead Width	Clip No.	Carrier No.	
.125 x .250	Straight	.150	.025	029 – 267	029 – 040	14
.150 x .250	Straight	.140	.026	029 – 267	029 – 188	14
.187 x .250	Straight	.165	.025	029 – 267	029 – 527	14
.250 x .250	Straight	.100	.025	029 – 267	029 – 003	14
.235 x .250	Straight	.115	.025	029 – 267	029 – 403	14
.250 x .375	Straight	.100	.025	029 – 267	029 – 003	14
.125 x .250	Preformed	.120	.025	029 – 268	029 – 005	14
.235 x .250	Preformed	Special	.025	029 – 268	029 – 417	14
.250 x .375	Preformed	Special	.025	029 – 268	029 – 528	14
.285 x .455	Straight	.240	.019	029 – 267	01161 – 161	16
.670 x .385	Straight	.240	.019	02011 – 241	10071 – 241	24

Table 2



