

MILITARY SPECIFICATION

SEMICONDUCTOR DEVICE, TRANSISTOR, NPN,
SILICON, SWITCHING, MEDIUM-POWER
TYPES 2N696, 2N697, 2N696S and 2N697S

This amendment forms a part of MIL-S-19500/99E, dated 31 July 1967,
and is approved for use by all Departments and Agencies of the
Department of Defense.

PAGE 1

- * Title, delete and substitute new title as printed above.
- * 1.1, add the following:
 "The suffix 'S' is used on devices that have 0.5 inch minimum to 0.75 inch maximum lead length."
- * 1.4, add the following new type numbers:
 Following "2N696" add "2N696S"; following "2N697" add "2N697S". Make these same changes wherever they occur throughout the document.

PAGE 2

- * Add the following paragraph:
 "3.5.1 'S' marking. The 'S' suffix shall be used on devices meeting the 0.5 inch minimum to 0.75 inch maximum lead length requirement."

PAGE 3

- * FIGURE 1: Delete and substitute new figure 1 as printed on page 2 of this amendment.

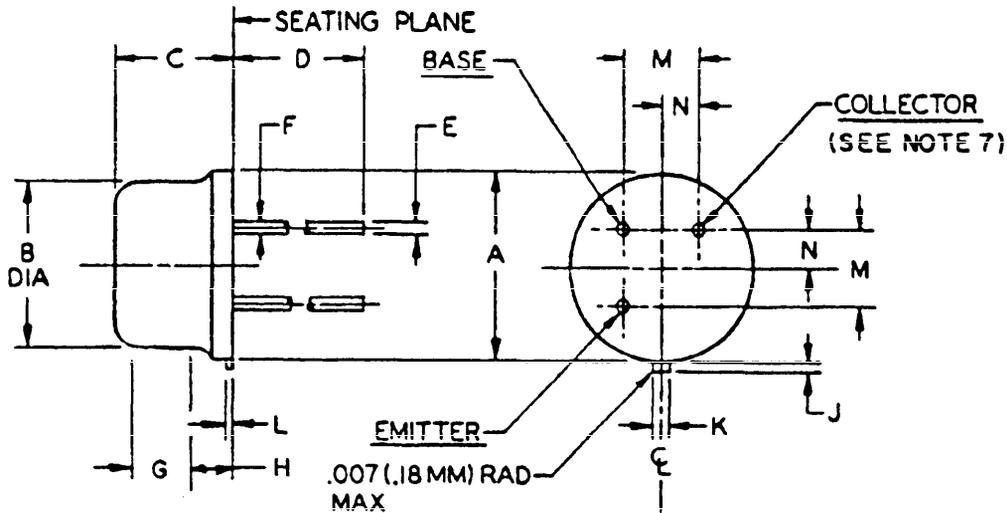
PAGE 4

- * FIGURE 2, title, delete and substitute:
 "FIGURE 2. Gage for lead and tab location."

PAGE 8

TABLE II, subgroup 2, seal (leak-rate), limits column: Delete " 5×10^{-7} " from minimum column and insert " 1×10^{-7} " in maximum column.

MIL-S-19500/99E
AMENDMENT 2



Letter	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
A	.335	.370	8.51	9.40	
B	1.305	1.335	17.75	18.51	
C	1.240	1.260	16.10	16.60	
* D	See notes 9, 10, and 11				
E	1.016	1.021	10.41	10.53	2, 9
F	1.016	1.019	10.41	10.48	3, 9
G	1.100	--	2.54	--	4
H	--	--	--	--	5
J	1.029	1.045	2.74	11.14	8
K	1.028	1.034	.71	.86	
L	1.009	1.125	.23	13.18	
M	.1414	Nom	3.592	Nom	6
N	.0707	Nom	1.796	Nom	6

NOTES:

1. Metric equivalents are given for general information only.
2. Measured in the zone beyond .250 (6.35 mm) from the seating plane.
3. Measured in the zone .050 (1.27 mm) and .250 (6.35 mm) from the seating plane.
4. Variations on dimension B in this zone shall not exceed .010 (0.25 mm).
5. Outline in this zone is not controlled.
6. When measured in a gaging plane .054 ±.001, -.000 (1.37 ±.03, -.00 mm) below the seating plane of the transistor, maximum diameter leads shall be within .007 (0.18 mm) of their true location relative to a maximum width tab. Smaller diameter leads shall fall within the outline of the maximum diameter lead tolerance. Figure 2 preferred measured method.
7. The collector shall be internally connected to the case.
8. Measured from the maximum diameter of the actual device.
9. All 3 leads (see 3.3.1 and 3.3.2).
- * 10. For transistor types 2N696S and 2N697S, D is .500 (12.70 mm) minimum, and .750 (19.05 mm) maximum.
- * 11. For transistor types 2N696 and 2N697, D is 1.500 (38.10 mm) minimum, and 1.750 (44.45 mm) maximum.

FIGURE 1. Physical dimensions.

MIL-S-19500/99E
AMENDMENT 2

The margins of this amendment are marked with asterisks to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Custodians:

Army - ER
Navy - EC
Air Force - 11

Preparing activity:
Army - ER

Agent:
DLA - ES

Review activities:

Army - AR, MI
Navy - SH
Air Force - 11, 17, 85

(Project 5961-1019-1)

User activities:

Army - SM
Navy - AS, CG, MC, OS
Air Force - 14, 19