

MILITARY SPECIFICATION

SEMICONDUCTOR DEVICES, SILICON, HIGH VOLTAGE RECTIFIER

TYPES 1N1731A, 1N1733A, AND 1N1734A

This amendment forms a part of Military Specification MIL-S-19500/142A, dated 13 May 1964, and is mandatory for use by all Departments and Agencies of the Department of Defense.

Page 1, paragraph 1.2,  $i_f$  column: Delete "1.05" and substitute "1.1."

Page 1, paragraph 1.2, BAROMETRIC PRESSURE, REDUCED (ALTITUDE OPERATION): Change to read: "15 mm Hg for 1N1731A; 33 mm Hg for 1N1733A; and 69 mm Hg for 1N1734A."

\* Page 3, add the following paragraph.  
 "3.3.1 Encapsulating materials. Encapsulating materials for all devices shall only be organic polymers."

Page 3: Delete paragraph 4.4.3, Pulse technique.

Page 4, Table I, Group A inspection, Subgroup 2: Change "Forward voltage" test to read as follows:

Examination or test	MIL-STD-750		L T P D	Min. Rej. No.	Symbol	Limits		
	Method	Details				Min	Max	Unit
Forward voltage  1N1731A 1N1733A 1N1734A	4011	$t_p \leq 8.3$ msec; duty cycle $\leq 2\%$ ; (pulse)  $i_f = 1.1$ a(pk) $i_f = 1.1$ a(pk) $i_f = 1.1$ a(pk)			$v_f$	0.8 2.4 4.0	3.6 6.6 9.9	v(pk) v(pk) v(pk)

Page 4, Table II, Group B inspection, Subgroup 2, End points: Change "Forward voltage" test to read as follows:

Forward voltage  1N1731A 1N1733A 1N1734A	4011	$t_p \leq 8.3$ msec; duty cycle $\leq 2\%$ ; (pulse)  $i_f = 1.1$ a(pk) $i_f = 1.1$ a(pk) $i_f = 1.1$ a(pk)			$v_f$	0.8 2.4 4.0	3.6 6.6 9.9	v(pk) v(pk) v(pk)
------------------------------------------------------	------	-------------------------------------------------------------------------------------------------------------------------	--	--	-------	-------------------	-------------------	-------------------------

\* 1/ The margins of this document are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous issue 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 issue.

MIL-S-19500/142A  
 AMENDMENT 3

Page 6, Table III, Group C inspection, Subgroup 1: Change "Barometric pressure, reduced (altitude operation)" test to read as follows:

Examination or test	MIL-STD-750		L T P D	Min. Rej. No.	Symbol	Limits		
	Method	Details				Min	Max	Unit
" Barometric pressure reduced (altitude operation)	1001	t = 60 sec min; Pressure = 15 mm Hg for 1N1731A; 33 mm Hg for 1N1733A; 69 mm Hg for 1N1734A				---	---	---

Custodians:  
 Army - EL  
 Navy - EC  
 Air Force - 11

Preparing activity:  
 Army - EL  
 (Project 5961-0096)

Review activities:  
 Army - EL, MU, MI  
 Navy - SH, EC  
 Air Force - 11, 17, 85  
 DSA - ES

User activities:  
 Army - EL, SM  
 Navy - AS, OS, MC, CG  
 Air Force - 19