The documentation and process conversion measures necessary to comply with this document shall be completed by 27 November 2019.

INCH-POUND

MIL-PRF-19500/356M 27 July 2019 SUPERSEDING MIL-PRF-19500/356L 27 June 2014

## PERFORMANCE SPECIFICATION SHEET

## SEMICONDUCTOR DEVICE, DIODE, SILICON, VOLTAGE REGULATOR, TYPES 1N4954 THROUGH 1N4996, 1N5968, 1N5969, AND 1N6632 THROUGH 1N6637, ENCAPSULATED (AXIAL LEADED AND SURFACE MOUNT PACKAGE) AND UNENCAPSULATED, 5, 2, AND 1 PERCENT VOLTAGE TOLERANCE, QUALITY LEVELS JAN, JANTX, JANTXV, JANS, JANHC AND JANKC

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-PRF-19500.

## 1. SCOPE

1.1 <u>Scope</u>. This specification covers the performance requirements for silicon, voltage regulator diodes with voltage tolerances of 5 percent, 2 percent, and 1 percent. Four levels of product assurance (JAN, JANTX, JANTXV, and JANS) are provided for each encapsulated device type as specified in MIL-PRF-19500, and two levels of product assurance (JANHC and JANKC) for each unencapsulated device type die.

## 1.2 Physical dimensions.

1.2.1 <u>Package outlines</u>. The device package outlines are as follows: an axial leaded package in accordance with figure 1 and square end-cap surface mount (US) in accordance with figure 2.

1.2.2 <u>Unencapsulated die</u>. The dimensions and topography for JANHC and JANKC unencapsulated die are in accordance with figures 3 and 4.

P <sub>T</sub> at T <sub>L</sub> = +65°C L = .375 inch (9.53 mm)	P <sub>T</sub> at T <sub>L</sub> = +25°C L = .375 inch (9.53 mm)	P⊤ at T <sub>EC</sub> = +140°C	P⊤ at T <sub>EC</sub> = +125°C	P <sub>T(PCB)</sub> at T <sub>A</sub> = +55°C	$T_{\rm J}$ and $T_{\rm STG}$	Barometric pressure (reduced)
1N4954 through 1N4996	1N5968, 1N5969, 1N6632 through 1N6637	1N4954US through 1N4996US	1N5968US, 1N5969US, 1N6632US through 1N6637US	1N4954, US through 1N4996, US 1N5968, US, 1N5969, US, 1N6632, US through 1N6637, US	1N4954 through 1N4996 1N5968, 1N5969, 1N6632 through 1N6637 including US suffix	1N4954 through 1N4996 1N5968, 1N5969, 1N6632 through 1N6637 including US suffix
(1) 5 W	(2) 5 W	(3) 5 W	(4) 5 W	(5) 0.8 W	-65°C to +175°C	8 mm Hg

1.3 Maximum ratings. Maximum ratings are as shown in maximum test ratings herein (see 3.8) and as follows:

See notes on next page.

Comments, suggestions, or questions on this document should be addressed to DLA Land and Maritime, ATTN: VAC, P.O. Box 3990, Columbus, OH 43218-3990, or emailed to Semiconductor@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at https://assist.dla.mil.



