

The documentation and process conversion measures necessary to comply with this revision shall be completed by 26 August 2019.

INCH-POUND

MIL-PRF-19500/472G
 26 April 2019
 SUPERSEDING
 MIL-PRF-19500/472F
 10 October 2012

PERFORMANCE SPECIFICATION SHEET

TRANSISTOR, NPN, SILICON, POWER DARLINGTON,
 TYPES 2N6350, 2N6351, 2N6352, AND 2N6353,
 QUALITY LEVELS JAN, JANTX, JANTXV, AND JANHC

Inactive for new design after 7 June 1999

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 Scope. This specification covers the performance requirements for NPN silicon power Darlington transistors. Three levels of product assurance (JAN, JANTX, and JANTXV) are provided for each encapsulated device type as specified in [MIL-PRF-19500](#). One level of product assurance (JANHC) is provided for each unencapsulated device type as specified in [MIL-PRF-19500](#).

1.2 Physical dimensions.

1.2.1 Package outlines. The device package outlines are as follows: 4-pin TO-33 in accordance with [figure 1](#) for device types 2N6350 and 2N6351 and 3-pin TO-66 in accordance with [figure 2](#) for device types 2N6352 and 2N6353.

1.2.2 Unencapsulated die. The dimensions and topography for JANHC unencapsulated die (A-version) is in accordance with [figure 3](#).

1.3 Maximum ratings. Unless otherwise specified, $T_A = +25^\circ\text{C}$.

Types	P_T		$R_{\theta JC}$ Max	V_{EB1}	V_{EB2}	V_{CB01} and V_{CER}	I_C	I_C (1)	I_{B1}	T_J and T_{STG}
	$T_A = +25^\circ\text{C}$	$T_C = +100^\circ\text{C}$								
	<u>W</u>	<u>W</u>	<u>$^\circ\text{C}/\text{W}$</u>	<u>V dc</u>	<u>V dc</u>	<u>V dc</u>	<u>A dc</u>	<u>A dc</u>	<u>A dc</u>	<u>$^\circ\text{C}$</u>
2N6350	1.0 (2)	5 (3)	20	12	6	80	5	10	0.5	-65 to +200
2N6351	1.0 (2)	5 (3)	20	12	6	150	5	10	0.5	-65 to +200
2N6352	2.0 (4)	25 (5)	4.0	12	6	80	5	10	0.5	-65 to +200
2N6353	2.0 (4)	25 (5)	4.0	12	6	150	5	10	0.5	-65 to +200

- (1) Applies for $t_p \leq 10$ ms, duty cycle ≤ 50 percent.
- (2) Derate linearly 5.72 mW/ $^\circ\text{C}$ for $T_A > +25^\circ\text{C}$.
- (3) Derate linearly 50 mW/ $^\circ\text{C}$ for $T_C > +100^\circ\text{C}$.
- (4) Derate linearly 11.4 mW/ $^\circ\text{C}$ for $T_A > +25^\circ\text{C}$.
- (5) Derate linearly 250 mW/ $^\circ\text{C}$ for $T_C > +100^\circ\text{C}$.

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AMSC N/A

FSC 5961

