

NPN DARLINGTON POWER SILICON TRANSISTOR

Qualified per MIL-PRF-19500/472

Devices

2N6350 2N6351 2N6352 2N6353

Qualified Level

**JAN
JANTX
JANTXV**

MAXIMUM RATINGS

Ratings	Symbol	2N6350 2N6352	2N6351 2N6353	Units
Collector-Emitter Voltage	V_{CER}	80	150	Vdc
Collector-Base Voltage	V_{CBO}	80	150	Vdc
Emitter-Base Voltage	V_{EBO}	12 6.0		Vdc Vdc
Base Current	I_B	0.5		Adc
Collector Current	I_C	5.0 10 ⁽¹⁾		Adc Adc
		2N6350 2N6351	2N6352 2N6353	
Total Power Dissipation @ $T_A = 25^{\circ}C$ @ $T_C = 100^{\circ}C$	P_T	1.0 ⁽²⁾ 5.0 ⁽³⁾	2.0 ⁽⁴⁾ 25 ⁽⁵⁾	W W
Operating & Storage Junction Temperature Range	T_J, T_{stg}	-65 to +200		$^{\circ}C$

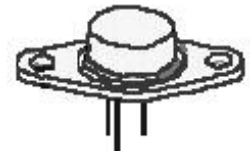
THERMAL CHARACTERISTICS

Characteristics	Symbol	2N6350 2N6351	2N6352 2N6353	Unit
Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	20	4.0	$^{\circ}C/W$

- 1) Applies for $t_p \leq 10$ ms, Duty cycle $\leq 50\%$
- 2) Derate linearly @ 5.72 mW/ $^{\circ}C$ above $T_A > 25^{\circ}C$
- 3) Derate linearly @ 50 mW/ $^{\circ}C$ above $T_C > 100^{\circ}C$
- 4) Derate linearly @ 11.4 mW/ $^{\circ}C$ above $T_A > 25^{\circ}C$
- 5) Derate linearly @ 250 mW/ $^{\circ}C$ above $T_C > 100^{\circ}C$



2N6350, 2N6351
TO-33*



2N6352, 2N6353
TO-24* (TO-213AA)

*See Appendix A for package outline

ELECTRICAL CHARACTERISTICS ($T_C = 25^{\circ}C$ unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
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OFF CHARACTERISTICS

Collector-Emitter Breakdown Voltage $I_C = 25$ mAdc, $R_{B1E} = 2.2$ k Ω , $R_{B2E} = 100$ Ω	2N6350, 2N6352 2N6351, 2N6353	$V_{(BR)CER}$	80 150	Vdc
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