

## 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 <sup>(1)</sup>		Adc Adc
		<b>2N6350 2N6351</b>	<b>2N6352 2N6353</b>	
Total Power Dissipation @ $T_A = 25^{\circ}C$ @ $T_C = 100^{\circ}C$	$P_T$	1.0 <sup>(2)</sup> 5.0 <sup>(3)</sup>	2.0 <sup>(4)</sup> 25 <sup>(5)</sup>	W W
Operating & Storage Junction Temperature Range	$T_J, T_{stg}$	-65 to +200		$^{\circ}C$

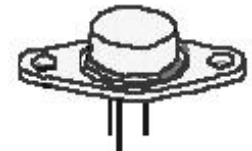
### THERMAL CHARACTERISTICS

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 $\Omega$ , $R_{B2E} = 100$ $\Omega$	2N6350, 2N6352 2N6351, 2N6353	$V_{(BR)CER}$	80 150	Vdc
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