



ELECTRONICS, INC.
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NTE2335

Silicon NPN Transistor

Darlington ^w/Internal Zener Diode for Line Operated TV

Features:

- Excellent Wide Safe Operating Area
- Included Avalanche Diode
- High DC Current Gain

Absolute Maximum Ratings: ($T_C = +25^\circ\text{C}$ unless otherwise specified)

Collector–Base Voltage, V_{CBO}	60 \pm 15V
Collector–Emitter Voltage, V_{CEO}	60 \pm 15V
Emitter–Base Voltage, V_{EBO}	6V
Collector Current, I_C	
Continuous	5A
Peak	20A
Collector Dissipation, P_C	80W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	–55° to +150°C

Electrical Characteristics: ($T_C = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\text{mA}, I_E = 0$	45	60	75	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 100\text{mA}, I_B = 0$	45	60	75	V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 6\text{V}, I_C = 0$	–	–	100	μA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 500\text{mA}$	2000		20000	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 1\text{mA}$	–	–	1.5	V
		$I_C = 1\text{A}, I_B = 1\text{mA}$	–	–	2.5	V
Base–Emitter Voltage	V_{BE}	$V_{CE} = 5\text{V}, I_C = 500\text{mA}$	–	–	1.8	V
Allowable Energy	E_T		80	–	–	W.sec

Schematic Diagram

