



NTE2353 Silicon NPN Transistor TV Horizontal Deflection Output w/Damper Diode

Features:

- High Speed: $t_f = 100\text{nsec}$
- High Breakdown Voltage: $V_{CBO} = 1500\text{V}$
- On-Chip Damper Diode

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

Collector–Base Voltage, V_{CBO}	1500V
Collector–Emitter Voltage, V_{CEO}	800V
Emitter–Base Voltage, V_{EBO}	6V
Collector Current, I_C	
Continuous	10A
Peak	30A
Collector Dissipation ($T_C = +25^\circ\text{C}$), P_C	70W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	–55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CES}	$V_{CE} = 1500\text{V}$	–	–	1.0	mA
	I_{CBO}	$V_{CB} = 800\text{V}$	–	–	10	μA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}$, $I_B = 0$	800	–	–	V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4\text{V}$	40	–	130	mA
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 8\text{A}$, $I_B = 1.6\text{A}$	–	–	5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 8\text{A}$, $I_B = 1.6\text{A}$	–	–	1.5	V
DC Current Gain	h_{FE1}	$V_{CE} = 5\text{V}$, $I_C = 1\text{A}$	8	–	–	
	h_{FE2}	$V_{CE} = 5\text{V}$, $I_C = 8\text{A}$	5	–	10	
Diode Forward Voltage	V_F	$I_{EC} = 10\text{A}$	–	–	2.0	V
FallTime	t_f	$I_C = 6\text{A}$, $I_{B1} = 1.2\text{A}$, $I_{B2} = 2.4\text{A}$	–	0.1	0.3	μs

