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## 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	$\mu\text{A}$
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	$\mu\text{s}$

