

## NTE2324

### Silicon NPN Transistor

### Color TV Horizontal Deflection Output

**Applications:**

- Color TV Horizontal Deflection Output

**Features:**

- High Speed ( $t_f = 100\text{nsec}$ )
- High Breakdown Voltage ( $V_{CBO} = 1500\text{V}$ )
- High Reliability (adoption of HVP process)

**Absolute Maximum Ratings:**

Collector to Base Voltage, $V_{CBO}$ .....	1500V
Collector to Emitter Voltage, $V_{CEO}$ .....	800V
Emitter to Base Voltage, $V_{EBO}$ .....	6V
Collector Current, $I_C$	
Continuous .....	8A
Peak .....	30A
Collector Dissipation ( $T_C = +25^\circ\text{C}$ ), $P_C$ .....	70W
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	$I_{EBO}$	$V_{EB} = 4\text{V}$	-	-	1.0	mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6\text{A}, I_B = 1.2\text{A}$	-	-	5.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 6\text{A}, I_B = 1.2\text{A}$	-	-	1.5	V
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	8	-	-	
		$V_{CE} = 5\text{V}, I_C = 6\text{A}$	5	-	10	
Fall Time	$t_f$	$I_C = 6\text{A}, I_{B1} = 1.2\text{A}, I_{B2} = 2.4\text{A}$	-	0.1	0.3	$\mu\text{s}$

