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## NTE2533

### Silicon NPN Transistor

### High-Definition Color Display

### Horizontal Deflection Output

### TO3PBL Type Package

**Features:**

- High Speed:  $t_f = 100\text{ns Typ}$
- High Breakdown Voltage:  $V_{CBO} = 1500\text{V}$
- High Reliability

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

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 .....	25A
Peak .....	50A
Collector Dissipation, $P_C$ .....	250W
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
	$I_{CBO}$	$V_{CB} = 800\text{V}, I_E = 0$	-	-	10	$\mu\text{A}$
Collector Sustaining Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}, I_B = 0$	800	-	-	V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 4\text{V}, I_C = 0$	-	-	1.0	mA
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	8	-	60	-
		$V_{CE} = 5\text{V}, I_C = 20\text{A}$	4	-	8	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 20\text{A}, I_B = 5\text{A}$	-	-	5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 20\text{A}, I_B = 5\text{A}$	-	-	1.5	V
Storage Time	$t_{stg}$	$I_C = 12\text{A}, I_{B1} = 2.4\text{A},$ $I_{B2} = -4.8\text{A}$	-	-	3	$\mu\text{s}$
Fall Time	$t_f$		-	-	0.2	$\mu\text{s}$

