



ELECTRONICS, INC.

44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

NTE2651 Silicon NPN Transistor Horizontal Deflection Output for Ultrahigh-Definition CRT Display

Features:

- High Speed
- High Breakdown Voltage
- High Reliability

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
Pulsed	25A
Collector Dissipation, P_C	
$T_A + 25^\circ\text{C}$	3W
$T_C + 25^\circ\text{C}$	70W
Operating Junction Temperature, T_J	$+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 800V, I_E = 0$	-	-	10	μA
	I_{CES}	$V_{CE} = 1500V, R_{BE} = 0$	-	-	1.0	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$	-	-	1.0	mA
Collector-Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = 100mA, I_B = 0$	800	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 8A, I_B = 2A$	-	-	5.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 8A, I_B = 2A$	-	-	1.5	V
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 1A$	20	-	30	
		$V_{CE} = 5V, I_C = 8A$	4	-	7	
Storage Time	t_{stg}	$I_C = 6A, I_{B1} = 1.2A, I_{B2} = 2.4A$	-	-	3.0	μs
Fall Time	t_f	$I_C = 6A, I_{B1} = 1.2A, I_{B2} = 2.4A$	-	1.0	0.2	μs

