



ELECTRONICS, INC.

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

