

NTE164 Silicon NPN Transistor TV Vertical Output

Description:

The NTE164 is a high voltage silicon NPN transistor in a TO3 type package designed for color TV vertical output applications.

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

Collector–Base Voltage, V_{CBO}	1500V
Collector–Emitter Voltage, V_{CER}	700V
Emitter–Base Voltage, V_{EBO}	5V
Collector Current, I_C	1A
Emitter Current, I_E	1A
Collector Dissipation ($T_C = +25^\circ\text{C}$), P_C	50W
Maximum Operating Junction Temperature, T_J	$+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° 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}	$V_{CB} = 500\text{V}, I_E = 0$	–	–	10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	–	–	5	μA
DC Current Gain	h_{FE}	$V_{CE} = 15\text{V}, I_C = 2\text{A}$	5	20	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2\text{A}, I_B = 0.6\text{A}$	–	5.0	8.5	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2\text{A}, I_B = 0.6\text{A}$	–	–	1.5	V
Transition Frequency	f_T	$V_{CE} = 10\text{V}, I_C = 0.1\text{A}$	–	3	–	MHz
Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$	–	95	–	pF
Fall Time	t_f	$I_{CP} = 2\text{A}, I_{B1} = 0.6\text{A}$	–	0.5	1.0	μs

