



NTE2676
Silicon NPN Transistor
High Voltage, High Speed Switch
TO3P(H)IS Type Package

Features:

- High Breakdown Voltage: $V_{CBO} = 1500V$ Min
- High Switching Speed
- Low Saturation Voltage

Applications:

- Color TV Horizontal Deflection Output

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

Collector–Base Voltage, V_{CBO}	.....	1500V
Collector–Emitter Voltage, V_{CEO}	.....	600V
Emitter–Base Voltage, V_{EBO}	.....	5V
Collector Current, I_C		
Continuous .....	.....	10A
Pulse .....	.....	20A
Continuous Base Current, I_B	.....	5A
Collector Power Dissipation ($T_C = +25^\circ\text{C}$), P_C	.....	50W
Operating Junction Temperature, T_J	.....	+150°C
Storage Temperature Range, T_{stg}	.....	-55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6A, I_B = 1.5A$	–	–	3.0	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 6A, I_B = 1.5A$	–	–	1.4	V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 1500V, I_E = 0$	–	–	1.0	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	–	–	10	μA
DC Current Gain	h_{FE}	$I_C = 1A, V_{CE} = 5V$	10	–	30	
		$I_C = 6A, V_{CE} = 5V$	4	–	8	
Current Gain Bandwidth Product	f_T	$I_C = 100mA, V_{CE} = 10V$	–	1.7	–	MHz
Output Capacitance	C_{OB}	$I_E = 0, V_{CB} = 10V, f_{test} = 1.0\text{MHz}$	–	135	–	pF
Storage Time	t_{stg}	$I_{CP} = 6A, I_{B1(end)} = 1.5A, f_H = 15.75\text{kHz}$	–	–	11	μs
Fall Time	t_f		–	–	0.7	μs

