



## NTE2677

### 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:** ( $T_A = +25^\circ C$  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
Pulse .....		30A
Continuous Base Current, $I_B$	.....	5A
Collector Power Dissipation ( $T_C = +25^\circ C$ ), $P_C$	.....	70W
Operating Junction Temperature, $T_J$	.....	+150°C
Storage Temperature Range, $T_{stg}$	.....	–55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 8A, I_B = 1.6A$	–	–	5.0	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 8A, I_B = 1.6A$	–	–	1.5	V
Collector Cutoff Current	$I_{CES}$	$V_{CE} = 1400V, V_{BE} = 0$	–	–	1.0	mA
	$I_{CBO}$	$V_{CB} = 800V, I_E = 0$	–	–	10	$\mu A$
		$V_{EB} = 4V, I_C = 0$	–	–	1.0	mA
DC Current Gain	$h_{FE}$	$I_C = 1A, V_{CE} = 5V$	15	–	40	
		$I_C = 8A, V_{CE} = 5V$	8	–	10	
Fall Time	$t_f$	$I_C = 6A, I_{B1} = 1.2A, I_{B2} = -2.4A, V_{CC} = 200V, R_L = 33.3\Omega$	–	–	0.3	$\mu s$

