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## NTE2642 Silicon NPN Transistor Horizontal Deflection Output High Speed Switch TO3P Full Pack

**Features:**

- High Breakdown Voltage
- High Reliability
- High Speed Switching
- Wide Area of Safe Operation (ASO)

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

Collector–Base Voltage, $V_{CBO}$ .....	1700V
Collector–Emitter Voltage, $V_{CES}$ .....	1700V
Collector–Emitter Voltage, $V_{CEO}$ .....	600V
Emitter–Base Voltage, $V_{EBO}$ .....	7V
Collector Current, $I_C$	
Continuous DC .....	16A
Pulse .....	30A
Base Current, $I_B$ .....	8A
Collector Power Dissipation, $P_C$	
$T_C = +25^\circ\text{C}$ .....	65W
$T_A = +25^\circ\text{C}$ .....	3.5W
Operating Junction Temperature, $T_J$ .....	+150°C
Storage Temperature Range, $T_{stg}$ .....	-55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I <sub>CBO</sub>	$V_{CB} = 1000V, I_E = 0$	-	-	50	μA
		$V_{CB} = 1700V, I_E = 0$	-	-	1	mA
Emitter Cutoff Current	I <sub>EBO</sub>	$V_{EB} = 7V, I_C = 0$	-	-	50	μA
DC Current Gain	h <sub>FE</sub>	$V_{CE} = 5V, I_C = 8A$	6	-	12	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 8A, I_B = 2A$	-	-	3	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 8A, I_B = 2A$	-	-	1.5	V
Transition Frequency	f <sub>T</sub>	$V_{CE} = 10V, I_C = 0.1A, f = 0.5MHz$	-	3	-	MHz

**Electrical Characteristics (Cont'd):** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
<b>Switching Time</b>						
Storage Time	$t_{stg}$	$I_C = 8\text{A}$ , Resistance loaded, $I_{B1} = 2\text{A}$ , $I_{B2} = -4\text{A}$	-	-	3.0	$\mu\text{s}$
Fall Time	$t_f$		-	-	0.2	$\mu\text{s}$

