

NTE2578

Silicon NPN Transistor

TV Horizontal Deflection Output

Features:

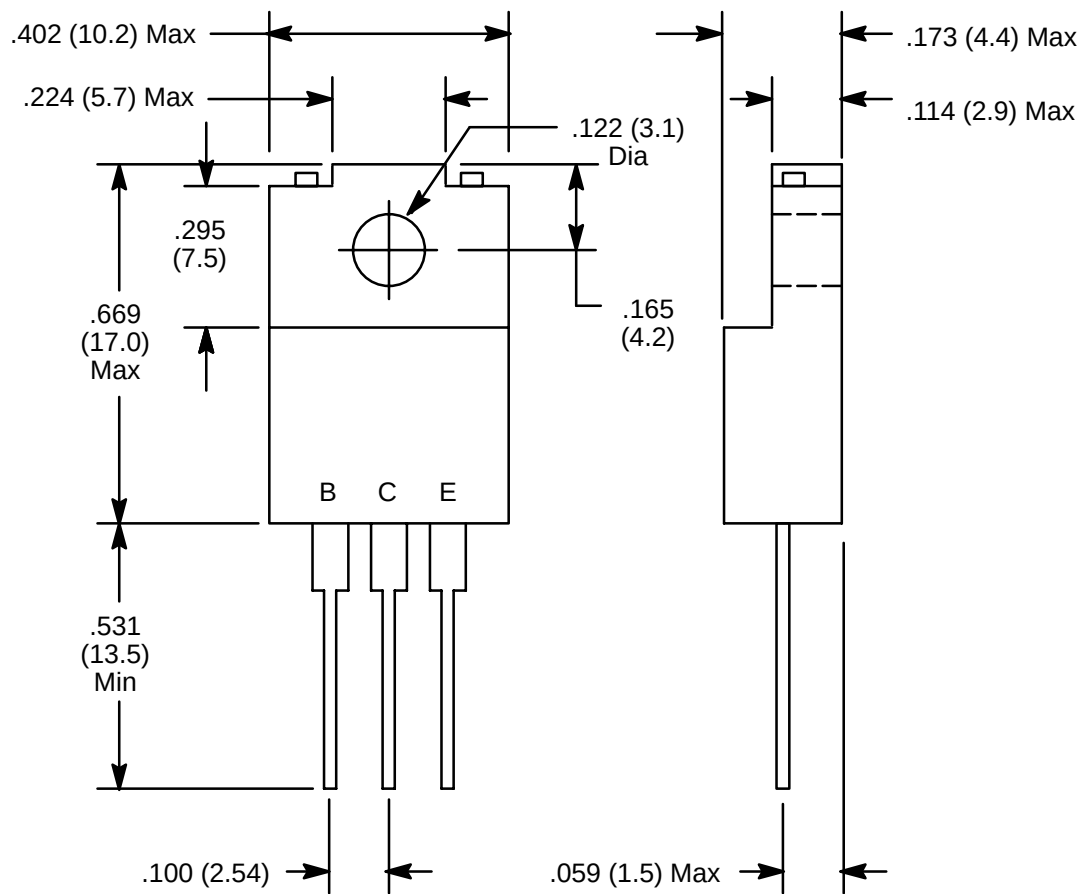
- Excellent Fall Time Permitting Efficient Drive with Less Internal Dissipation

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

Collector–Base Voltage, V_{CBO}	200V
Collector–Emitter Voltage, V_{CEO}	60V
Emitter–Base Voltage, V_{EBO}	6V
Collector Current, I_C	
Continuous	4.5A
Peak	10A
Collector Dissipation ($T_C = +25^\circ\text{C}$), P_C	30W
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}	$V_{CB} = 40\text{V}, I_E = 0$	–	–	0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	–	–	0.1	mA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	30	–	60	
		$V_{CE} = 5\text{V}, I_C = 4\text{A}$	25	–	–	
Gain Bandwidth Product	f_T	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	–	10	–	MHz
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 4\text{A}, I_B = 400\text{mA}$	–	0.5	1.0	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 4\text{A}, I_B = 400\text{mA}$	–	–	1.5	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 5\text{mA}, I_E = 0$	200	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 5\text{mA}, R_{BE} = \infty$	60	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C = 5\text{mA}, I_C = 0$	6	–	–	V
Fall Time	t_f	$V_{CC} = 50\text{V}, V_{BB} = 5\text{V},$ $I_C = 5\text{A}, I_{B1} = -I_{B2} = 500\text{mA},$ $PW = 20\mu\text{s}, \text{Duty Cycle} \leq 2.5\%$	–	0.2	0.5	μs



NOTE: Tab is isolated