



**ELECTRONICS, INC.**  
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## NTE2578 Silicon NPN Transistor TV Horizontal Deflection Output

**Features:**

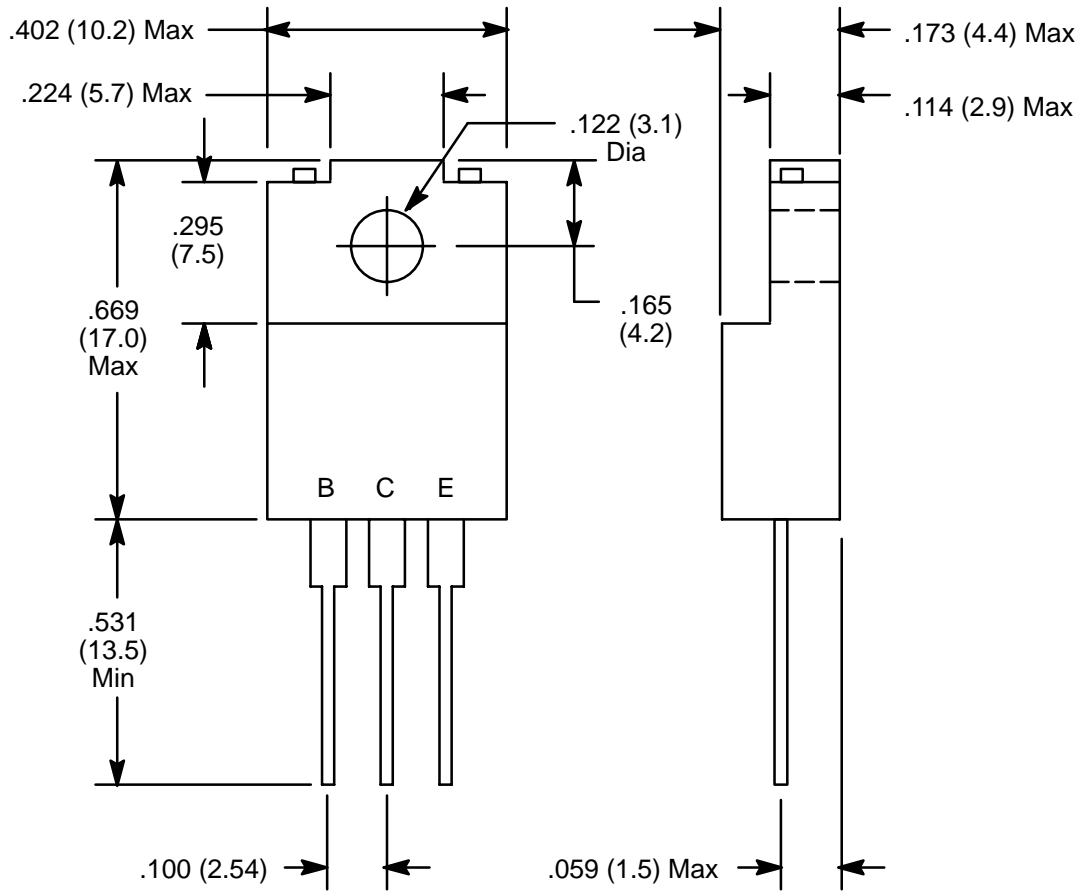
- Excellent Fall Time Permitting Efficient Drive with Less Internal Dissipation

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



**NOTE:** Tab is isolated