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## NTE2588 Silicon NPN Transistor Horizontal Output for HDTV

**Features:**

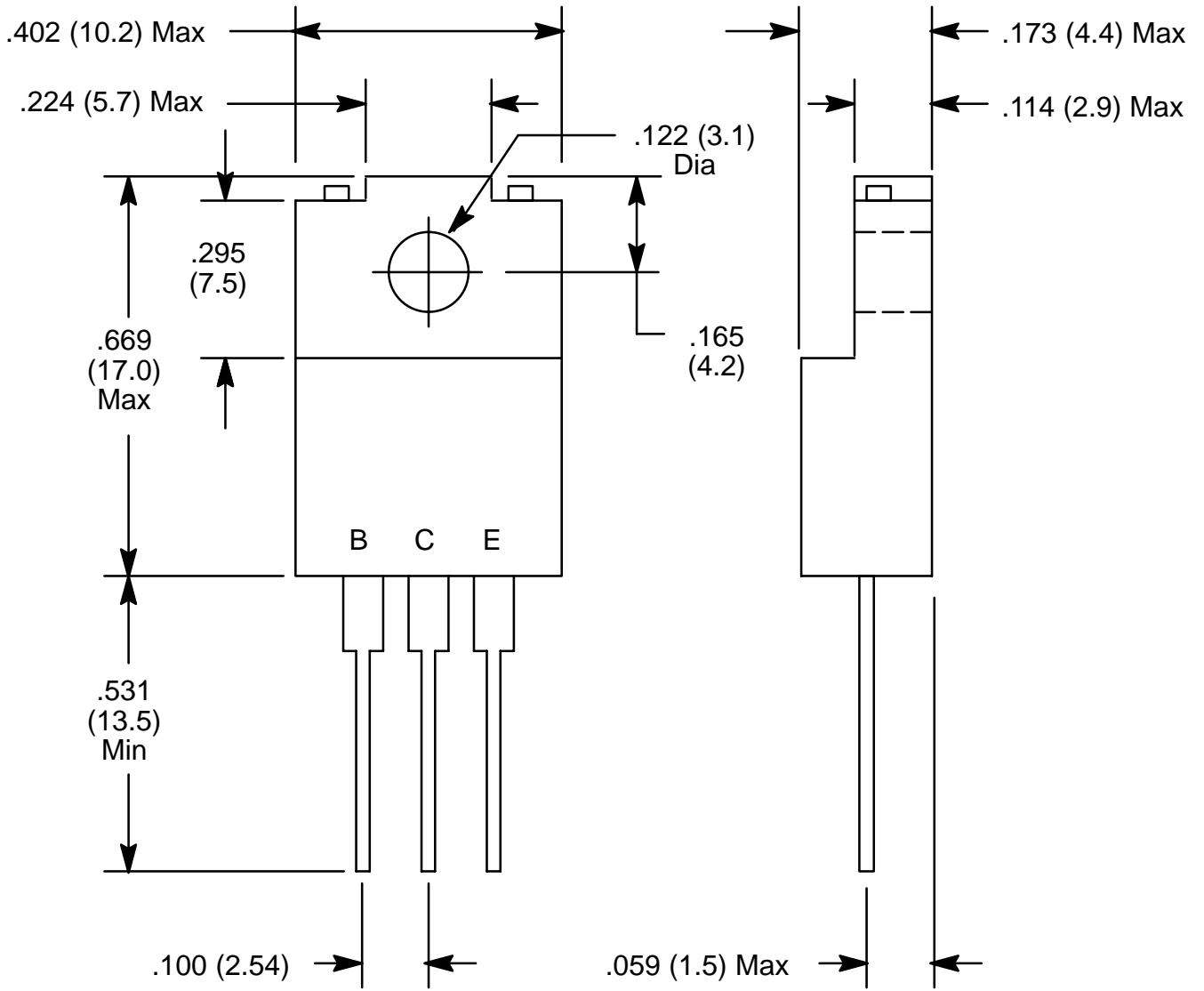
- High Breakdown Voltage:  $V_{(BR)CEO} = 1200V$  Min
- Isolated TO220 Type Package

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

Collector–Base Voltage, $V_{CBO}$ .....	1500V
Collector–Emitter Voltage, $V_{CEO}$ .....	1200V
Emitter–Base Voltage, $V_{EBO}$ .....	5V
Collector Current, $I_C$	
Continuous .....	30mA
Peak .....	100mA
Collector Power Dissipation, $P_C$ .....	2W
Operating Junction Temperature, $T_J$ .....	+150°C
Storage Temperature Range, $T_{stg}$ .....	–55° to +150°C
Maximum Thermal Resistance, Junction–to–Case, $R_{thJC}$ .....	8.3°C/W

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 1200V, I_E = 0$	–	–	1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 4V, I_C = 0$	–		1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = 5V, I_C = 1.5A$	10	–	60	
Gain Bandwidth Product	$f_T$	$V_{CE} = 10V, I_C = 1.5A$	–	6	–	MHz
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 3mA, I_B = 0.6mA$	–	–	5	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 3mA, I_B = 0.6mA$	–	–	2	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	1500	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	1200	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	5	–	–	V
Output Capacitance	$C_{ob}$	$V_{CB} = 100V, f = 1MHz$	–	2.0	–	pF



**NOTE:** Tab is isolated