ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

NTE2300
Silicon NPN Transistor
High Voltage, Horizontal Output

Description:

The NTE2300 is a silicon NPN transistor in a TO3P type package designed for use in large screen color TV deflection circuits.

Features:

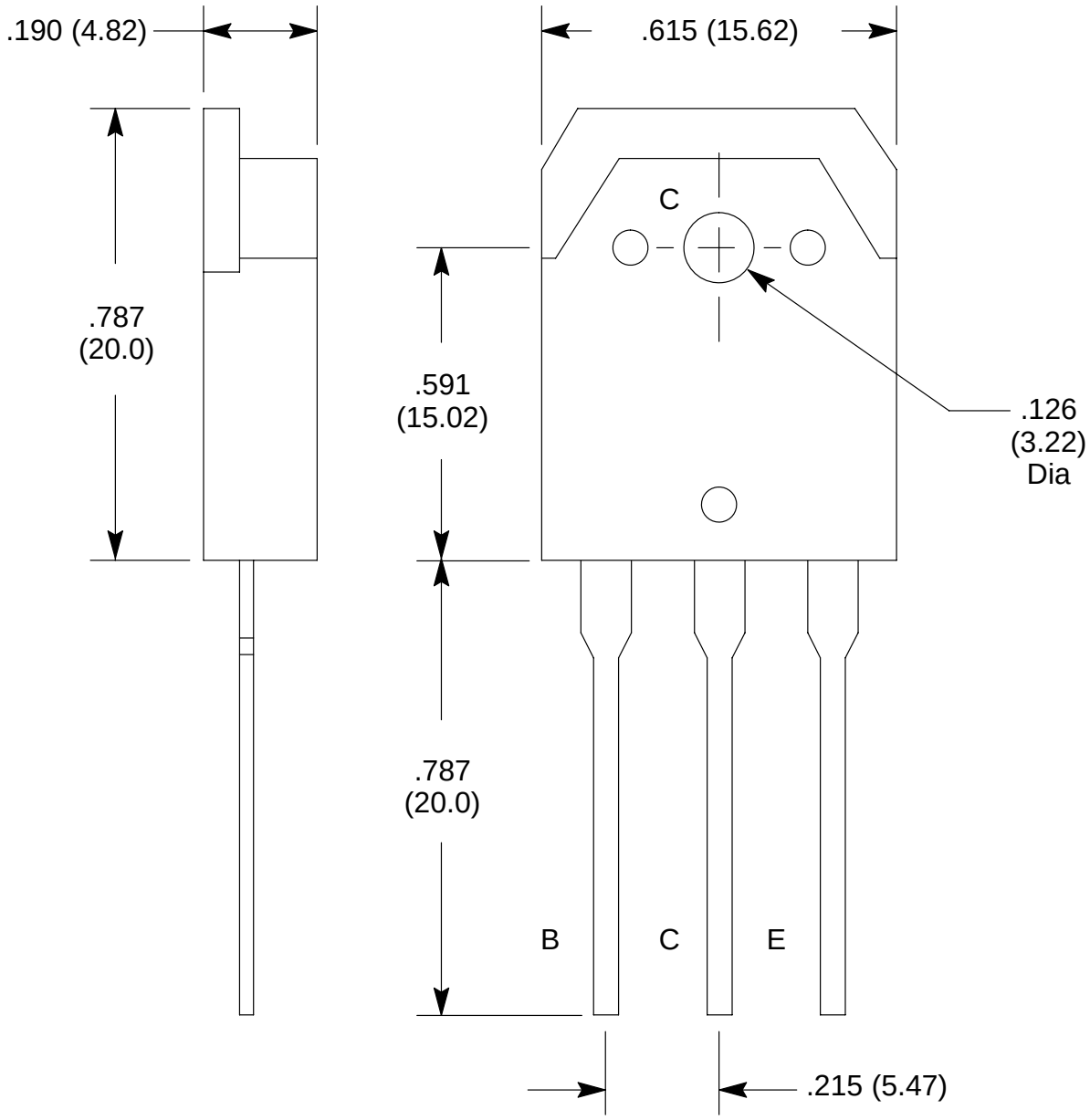
- High Breakdown Voltage and High Reliability
- High Switching Speed

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Collector–Base Voltage, V_{CBO} 1500V
Collector–Emitter Voltage, V_{CEO} 800V
Emitter–Base Voltage, V_{EBO} 7V
Collector Current, I_C
  Continuous 5A
  Peak 16A
Collector Dissipation (T_C = +25°C), P_D 120W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

Electrical Charactertistics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 800V, I_E = 0	–	–	10	µA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 5V, I_C = 0	–	–	1	mA
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C = 1A	8	–	–	
Current–Gain Bandwidth Product	f_T	V_{CE} = 10V, I_C = 1A	–	3	–	MHz
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 4A, I_B = 0.8A	–	–	5.0	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 4A, I_B = 0.8A	–	–	1.5	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 5mA, I_E = 0	1500	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 100mA, R_{BE} = ∞	800	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 200mA, I_C = 0	7	–	–	V
Fall Time	t_f	I_C = 4A, I_{B1} = 0.8A, I_{B2} = –1.6A	–	–	0.4	µs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C
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