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

NTE2314
Silicon PNP Transistor
High Current, High Speed Switch
(Compl to NTE2304)

Description:

The NTE2314 is a silicon PNP transistor in a TO3P type package. Typical applications include relay drivers, high–speed inverters, converters, and other general high–current switching applications.

Features:

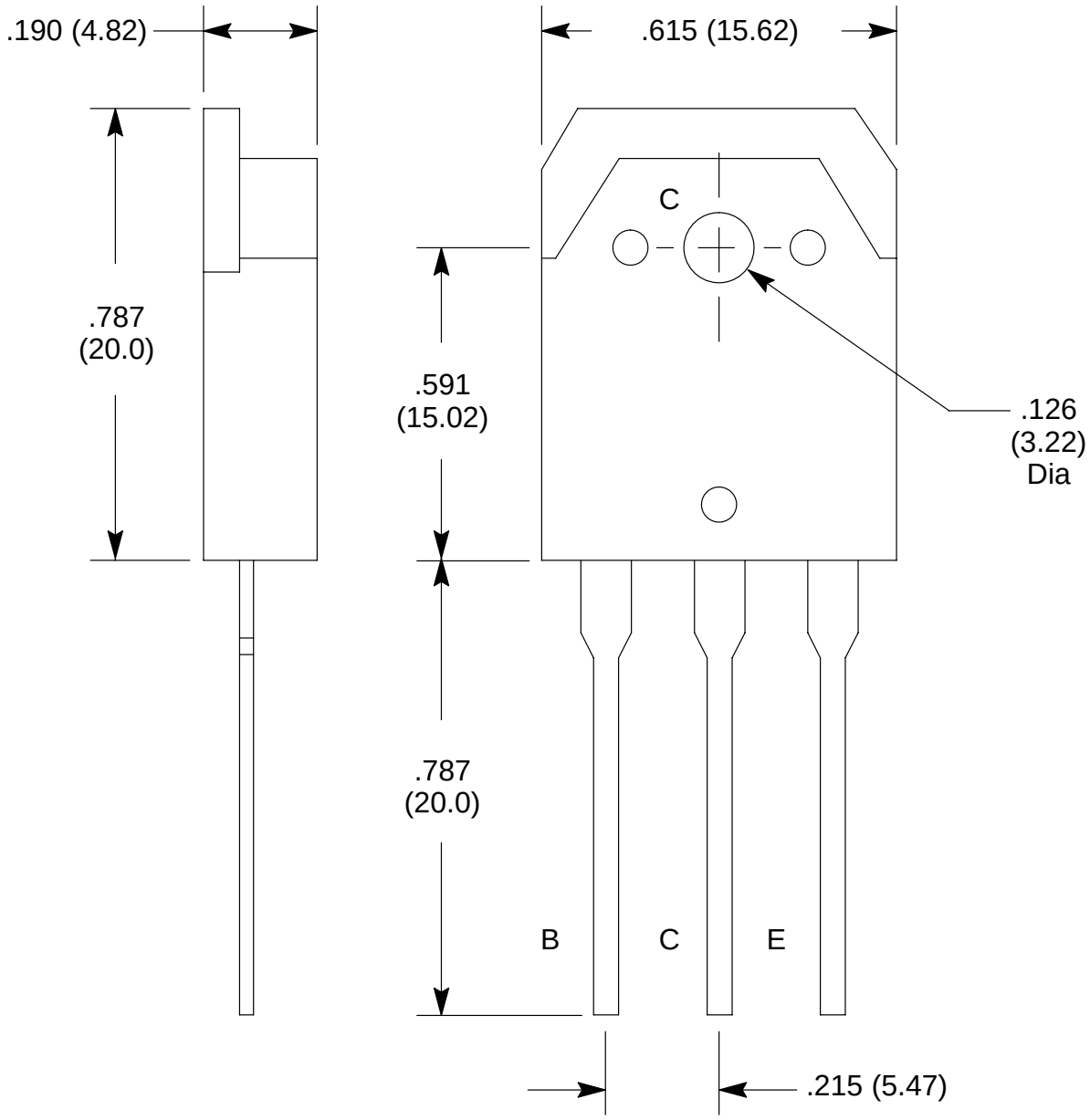
- Low Collector–Emitter Saturation Voltage
- Wide ASO and Resistant to Breakdowns

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

Collector–Base Voltage, V_{CBO} 60V
Collector–Emitter Voltage, V_{CEO} 50V
Emitter–Base voltage, V_{EBO} 6V
Collector Current, I_C
  Continuous 15A
  Peak 20A
Allowable Collector Dissipation (T_C = +25°C), P_C 90W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Ambient Temperature Range, T_{stg} . . . . . –55° to +150°C

Electrical Characteristics: (T_A = +25°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} = 4V, I_C = 0	–	–	0.1	mA
DC Current Gain	h_{FE}	V_{CE} = 2V, I_C = 1A	100	–	200	
		V_{CE} = 2V, I_C = 8A	30	–	–	
Current Gain–Bandwidth Product	f_T	V_{CE} = 5V, I_C = 1A	–	20	–	MHz
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 8A, I_B = 0.4A	–	0.26	0.5	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 1mA, I_E = 0	60	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CBO}$	I_C = 1mA, R_{BE} = ∞	50	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 1mA, I_C = 0	6	–	–	V
Turn–On Time	t_{on}	$10I_{B1} = -10I_{B2} = I_C$ = 2A, PW = 20µs	–	0.2	–	µs
Storage Time	t_{stg}		–	0.5	–	µs
Fall Time	t_f		–	0.1	–	µs


.190 (4.82)
.615 (15.62)
.787
(20.0)
.591
(15.02)
C
.126
(3.22)
Dia
.787
(20.0)
B
C
E
.215 (5.47)