

NTE2557 Silicon NPN Transistor Darlington, High Voltage Switch, Power Amp

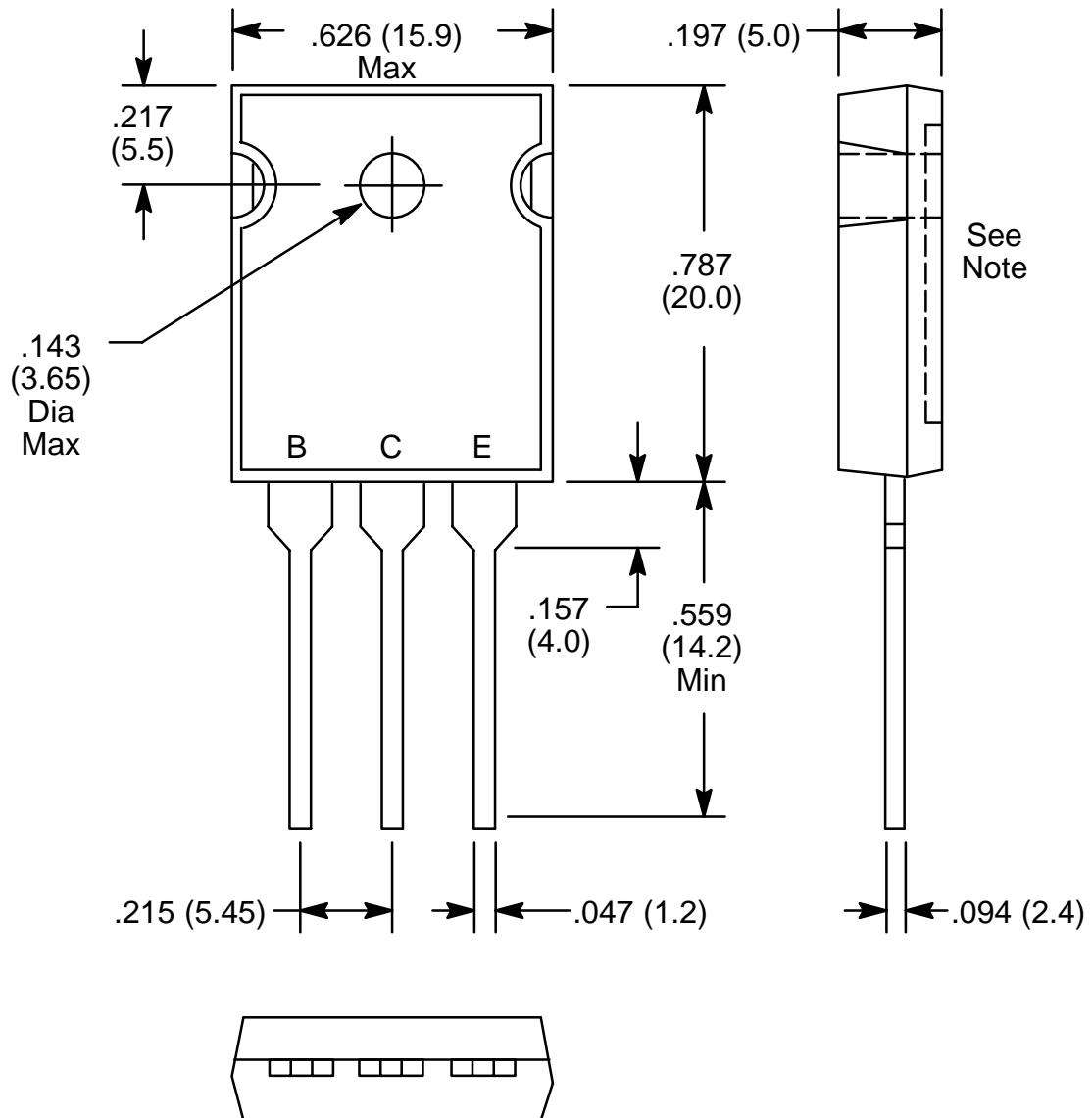
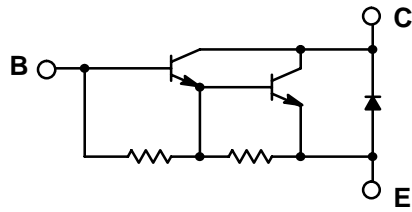
Absolute Maximum Ratings:

Collector–Base Voltage, V_{CBO}	200V
Collector–Emitter Voltage, V_{CEO}	200V
Emitter–Base Voltage, V_{EBO}	7V
Collector Current, I_C	
Continuous	15A
Peak	22A
Base Current, I_B	
Continuous	1A
Peak	2A
Total Transistor Dissipation ($T_C = +25^\circ\text{C}$), P_T	100W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	–55° to +150°C
Thermal Resistance, Junction–to–Case, R_{thJC}	1.25°C/W

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 200V$	–	–	0.1	mA
	I_{CEO}	$V_{CE} = 200V$	–	–	0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 7V$	–	–	5.0	mA
DC Current Gain	h_{FE}	$V_{CE} = 3V, I_C = 10A$	1500	–	30000	
Transistion Frequency	f_T	$V_{CE} = 10V, I_C = 1.5A$	–	20	–	MHz
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10A, I_B = 30mA$	–	–	1.5	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10A, I_B = 30mA$	–	–	2.0	V
Turn–On Time	t_{on}	$I_{B1} = I_{B2} = 30mA,$ $I_C = 10A, R_L = 3\Omega,$ $V_{BB2} = 4V$	–	–	2	μs
Storage Time	t_{stg}		–	–	8	μs
Fall Time	t_f		–	–	5	μs

NPN



Note: Pin2 connected to metal part of mounting surface.