



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

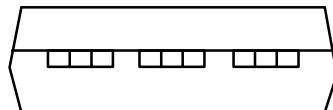
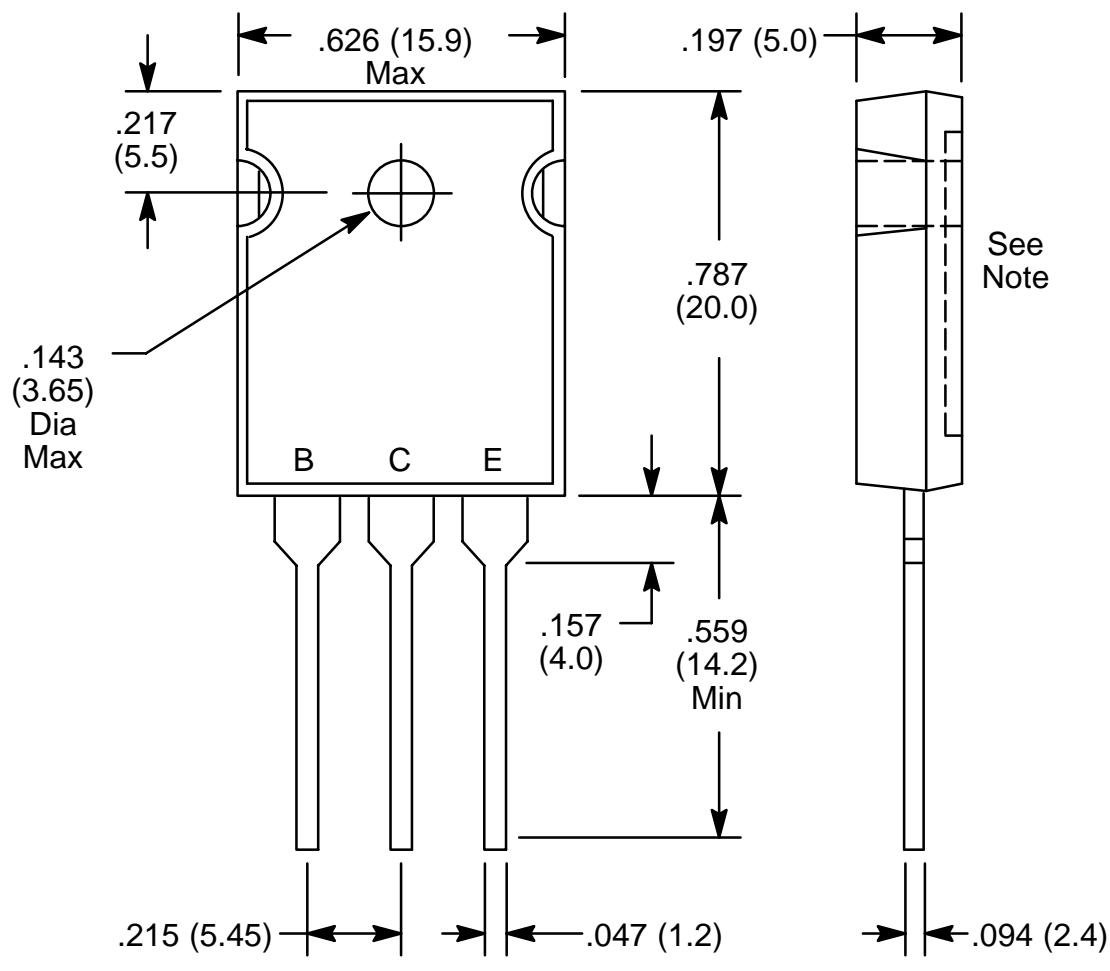
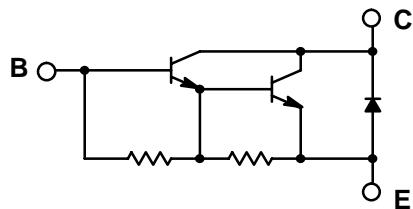
### Absolute Maximum Ratings:

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:** Pin 2 connected to metal part of mounting surface.