

NTE2543

Silicon NPN Transistor Darlington, Motor/Relay Driver

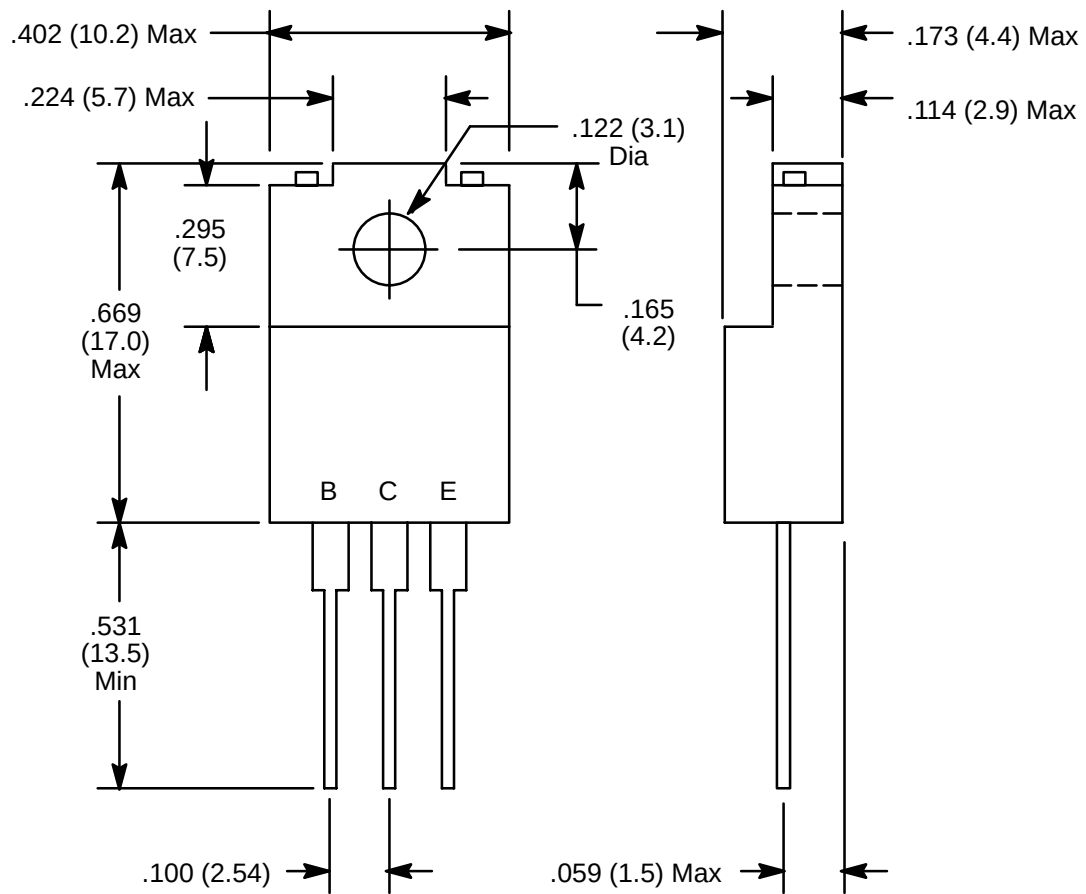
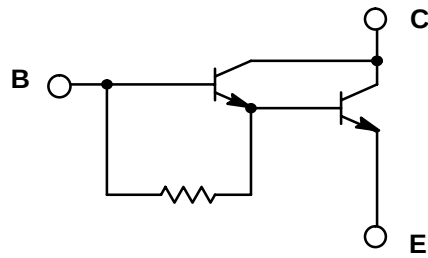
Absolute Maximum Ratings:

Collector Base Voltage, V_{CBO}	300V
Collector Emitter Voltage, V_{CEO}	250V
Emitter Base Voltage, V_{EBO}	20V
Collector Current, I_C	6A
Base Current, I_B	1A
Collector Power Dissipation ($T_{FL} = +25^{\circ}\text{C}$), P_C	40W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	-55° to +150°C

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 300\text{V}, I_E = 0$	—	—	100	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 20\text{V}, I_C = 0$	—	—	10	mA
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 25\text{mA}, R_{BE} = \infty$	250	—	—	V
DC Current Gain	h_{FE}	$V_{CE} = 2\text{V}, I_C = 2\text{A}$	2000	—	—	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2\text{A}, I_B = 2\text{mA}$	—	—	1.5	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2\text{A}, I_B = 2\text{mA}$	—	—	2.0	V

Schematic Diagram



NOTE: Tab is isolated