



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

**NTE2543**  
**Silicon NPN Transistor**  
**Darlington, Motor/Relay Driver**  
**TO-220 Full Pack**

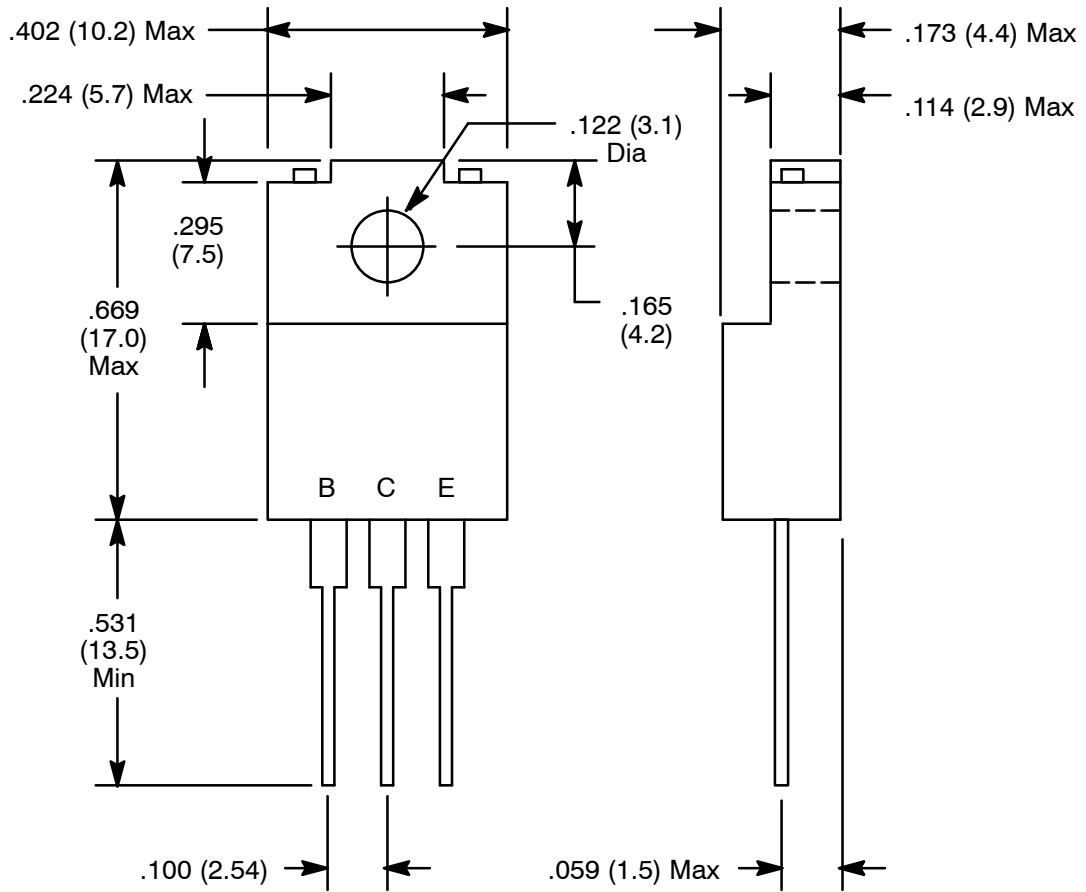
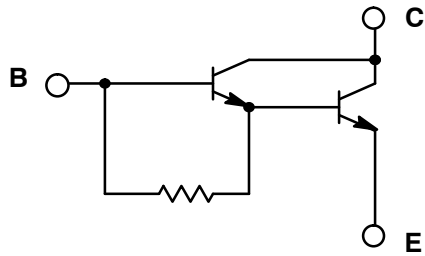
**Absolute Maximum Ratings:**

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 ( $T_{FL} = +25^{\circ}C$ ), $P_C$ .....	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	$I_{CBO}$	$V_{CB} = 300V, I_E = 0$	-	-	100	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 20V, I_C = 0$	-	-	10	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 25mA, R_{BE} = \infty$	250	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE} = 2V, I_C = 2A$	2000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 2mA$	-	-	1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2A, I_B = 2mA$	-	-	2.0	V

### Schematic Diagram



**NOTE:** Tab is isolated