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

NTE2541 (NPN) & NTE2542 (PNP)
Silicon Complementary Transistors
Darlington, Motor/Relay Driver

Absolute Maximum Ratings:

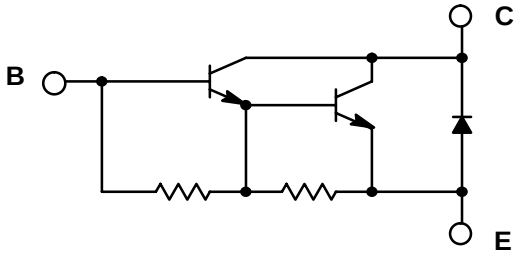
Collector Base Voltage, V_{CBO} 120V
Collector Emitter Voltage, V_{CEO} 120V
Emitter Base Voltage, V_{EBO} 6V
Collector Current, I_C
  Continuous 25A
  Pulse 40A
Continuous Base Current. I_B 2A
Collector Power Dissipation (T_{FL} = +25°C), P_C 120W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

Electrical Characteristics: (Note 1)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 120V, I_E = 0	–	–	10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 6V, I_C = 0	10	–	–	mA
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 25mA, R_{BE} = ∞	120	–	–	V
DC Current Gain	h_{FE}	V_{CE} = 4V, I_C = 12A	2000	–	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 12A, I_B = 24mA	–	–	1.8	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 12A, I_B = 24mA	–	–	2.5	V

Note 1. For NTE2542, the polarity is reversed.

NTE2541
(NPN)



NTE2542
(PNP)