

NTE2574 (NPN) & NTE2575 (PNP) Silicon Complementary Transistors Video Output for HDTV

Features:

- High Collector Emitter Breakdown Voltage: $V_{CEO} = 120V$ Min
- High Gain Bandwidth Product: $f_T = 400MHz$ Typ
- Low Reverse Transfer Capacitance and Excellent High Frequency Characteristics:
 NTE2574: $C_{re} = 2.7pF$
 NTE2575: $C_{re} = 4.0pF$
- Isolated TO220 Type Package

Absolute Maximum Ratings: ($T_C = +25^\circ C$ unless otherwise specified)

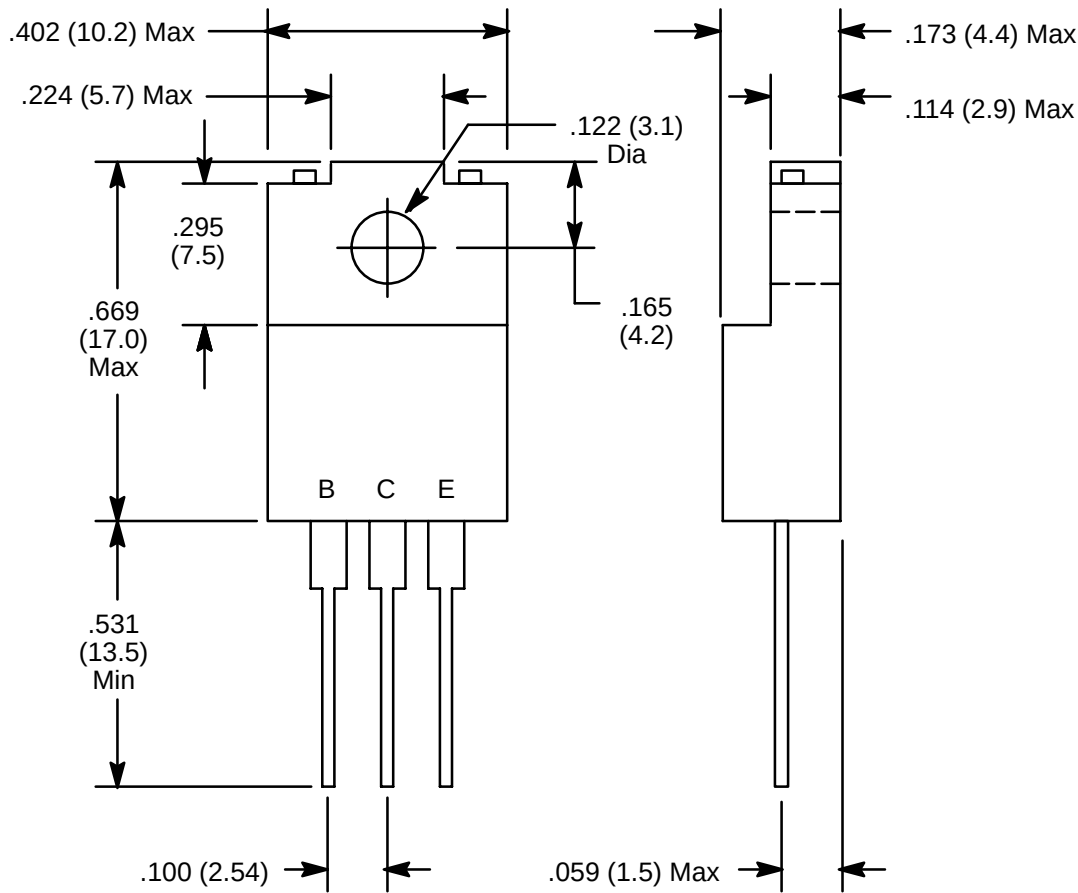
Collector–Base Voltage, V_{CBO}	120V
Collector–Emitter Voltage, V_{CEO}	120V
Emitter–Base Voltage, V_{EBO}	3V
Collector Current, I_C	
Continuous	400mA
Peak	600mA
Collector Power Dissipation, P_C	
$T_C = +25^\circ C$	1.8W
$T_A = +50^\circ C$	10W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	–55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 80V, I_E = 0$	–	–	0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 2V, I_C = 0$	–		1.0	μA
DC Current Gain	h_{FE}	$V_{CE} = 10V, I_C = 50mA$	100	–	320	
		$V_{CE} = 10V, I_C = 200mA$	20	–	–	
Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 50mA$	–	400	–	MHz
Output Capacitance NTE2574	C_{ob}	$V_{CB} = 30V, f = 1MHz$	–	3.1	–	pF
NTE2575			–	4.4	–	pF

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Transfer Capacitance NTE2574	C_{re}	$V_{CB} = 30\text{V}, f = 1\text{MHz}$	–	2.7	–	pF
NTE2575			–	4.0	–	pF
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 50\text{mA}, I_B = 5\text{mA}$	–	–	1.0	V
Emitter Base Saturation Voltage	$V_{BE(sat)}$	$I_C = 50\text{mA}, I_B = 5\text{mA}$	–	–	1.0	V



NOTE: Tab is isolated