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## 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

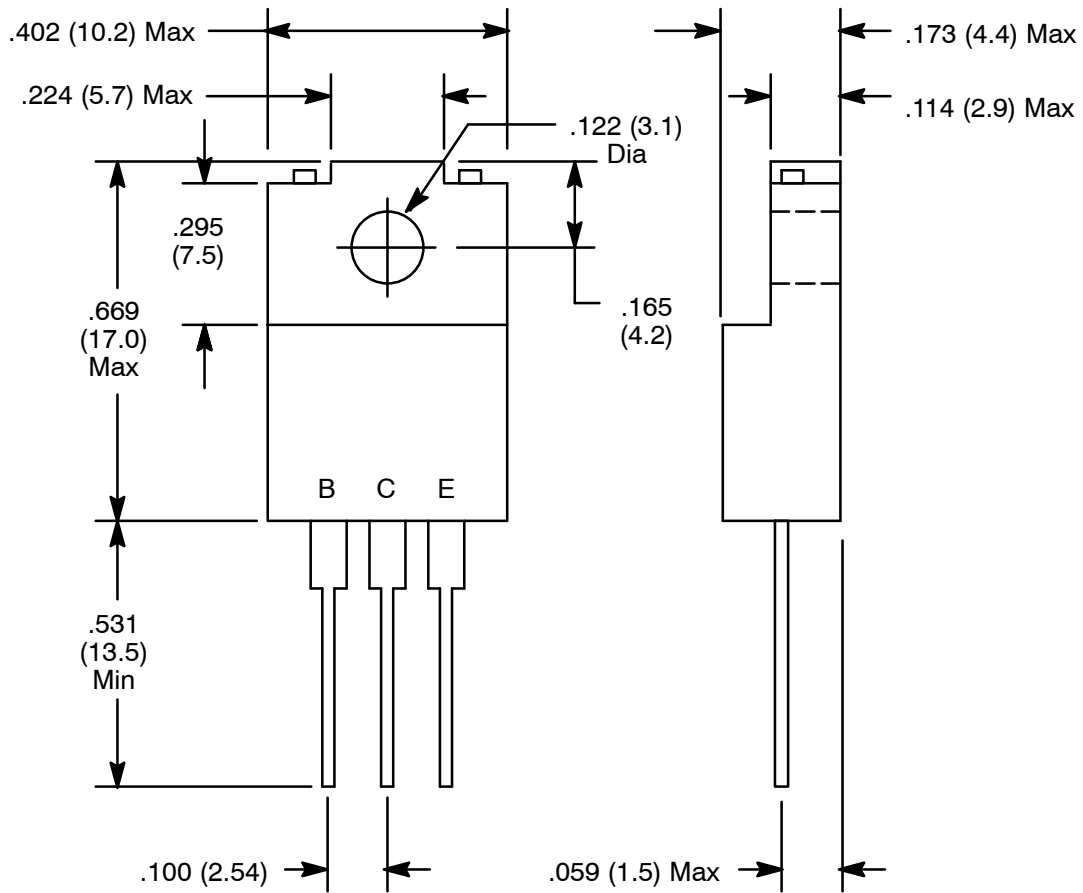
Note 1. **NTE2574** is a **discontinued** device and **no longer available**.

**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	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 2V, I_C = 0$	–		1.0	$\mu A$
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	$C_{ob}$	$V_{CB} = 30V, f = 1MHz$	–	3.1	–	pF
			–	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