



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

## NTE2574 (NPN) & NTE2575 (PNP) Silicon Complementary Transistors Video Output for HDTV TO-220 Full Pack

### 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:  $C_{re} = 4.0pF$

**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

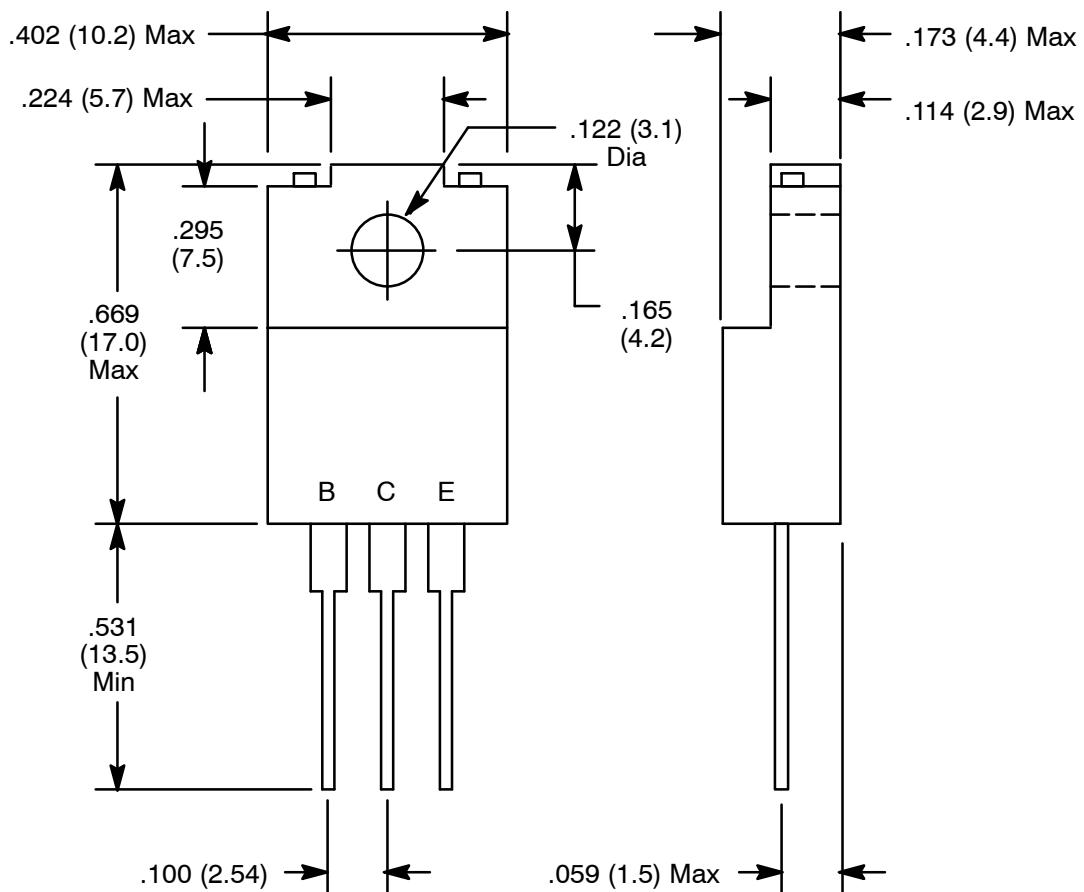
Note 1. **NTE2574** is a discontinued device and no longer available.

**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 NTE2574	$C_{ob}$	$V_{CB} = 30V$ , $f = 1MHz$	-	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	$V_{CE(\text{sat})}$	$I_C = 50\text{mA}$ , $I_B = 5\text{mA}$	-	-	1.0	V
Emitter Base Saturation Voltage	$V_{BE(\text{sat})}$	$I_C = 50\text{mA}$ , $I_B = 5\text{mA}$	-	-	1.0	V



**NOTE:** Tab is isolated