



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

## NTE2697 Silicon NPN Transistor General Purpose TO-220 Type Package

### Features:

- Low Collector Saturation Voltage:  $V_{CE(sat)} = 0.5V$  Max @  $I_C = 3A$
- Collector-Emitter Breakdown Voltage:  $V_{(BR)CEO} = 120V$  Min
- Good Linearity of  $h_{FE}$

### Applications:

- Humidifier
- DC/DC Converter
- General Purpose Power Amplifiers

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

Collector-Base Voltage, $V_{CBO}$ .....	200V
Collector-Emitter Voltage, $V_{CEO}$ .....	120V
Emitter-Base Voltage, $V_{EBO}$ .....	8V
Collector Current, $I_C$	
Continuous .....	7A
Pulse .....	14A
Continuous Base Current, $I_B$ .....	3A
Collector Power Dissipation ( $T_C = +25^\circ C$ ), $P_C$ .....	50W
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-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 50mA, I_B = 0$	120	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 3A, I_B = 300mA$	-	-	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 3A, I_B = 300mA$	-	-	1.2	V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = 200V, I_E = 0$	-	-	100	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = 8V, I_C = 0$	-	-	100	$\mu A$
DC Current Gain	$h_{FE}$	$I_C = 3A, V_{CE} = 4V$	100	-	200	



