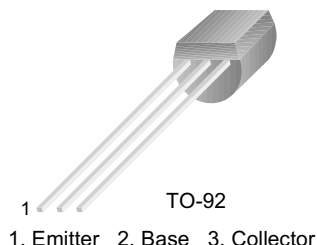


# 2N5550

2N5550

## Amplifier Transistor

- Collector-Emitter Voltage:  $V_{CE0} = 140V$
- Collector Dissipation:  $P_C(\text{max}) = 625mW$



## NPN Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_a = 25^\circ C$ unless otherwise noted

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	160	V
$V_{CEO}$	Collector-Emitter Voltage	140	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current	600	mA
$P_C$	Collector Dissipation	625	mW
$T_J$	Junction Temperature	150	$^\circ C$
$T_{STG}$	Storage Temperature	-55 ~ 150	$^\circ C$

• Refer to 2N5551 for graphs

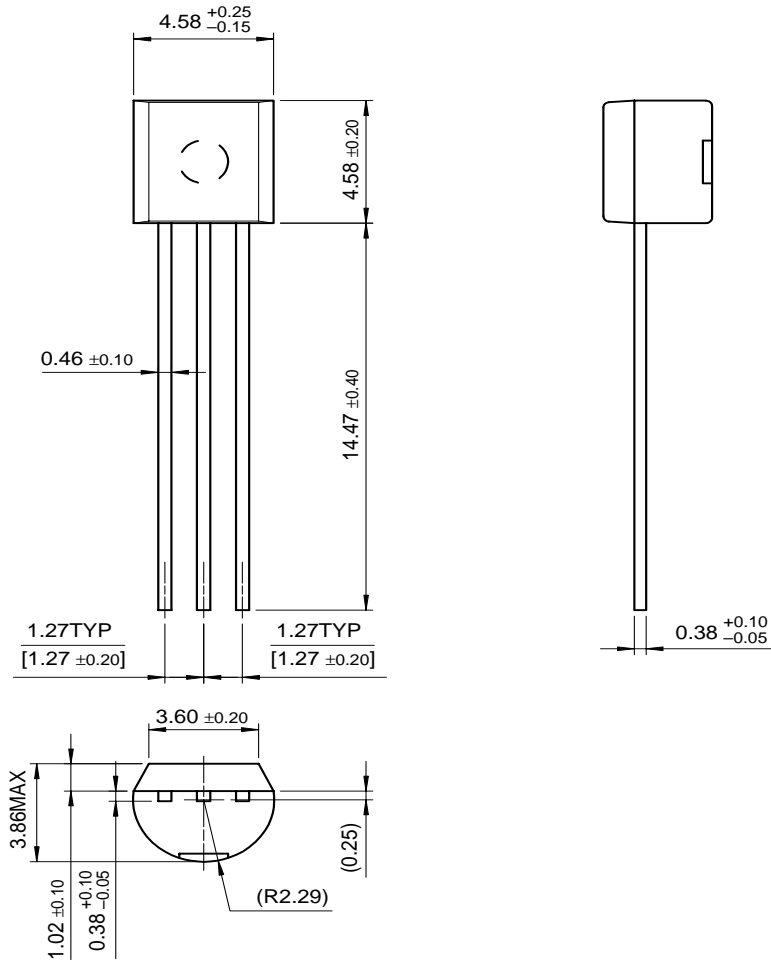
### Electrical Characteristics $T_a = 25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = 100\mu A, I_E = 0$	160			V
$BV_{CEO}$	* Collector-Emitter Breakdown Voltage	$I_C = 1mA, I_B = 0$	140			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = 10\mu A, I_C = 0$	6			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = 100V, I_E = 0$			100	nA
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = 4V, I_C = 0$			50	nA
$h_{FE}$	* DC Current Gain	$I_C = 1mA, V_{CE} = 5V$ $I_C = 10mA, V_{CE} = 5V$ $I_C = 50mA, V_{CE} = 5V$	60 60 20		250	
$V_{CE}(\text{sat})$	* Collector-Emitter Saturation Voltage	$I_C = 10mA, I_B = 1mA$ $I_C = 50mA, I_B = 5mA$			0.15 0.25	V
$V_{BE}(\text{sat})$	* Base-Emitter Saturation Voltage	$I_C = 10mA, I_B = 1mA$ $I_C = 50mA, I_B = 5mA$			1 1.2	V
$f_T$	Current Gain Bandwidth Product	$I_C = 10mA, V_{CE} = 10V,$ $f = 100MHz$	100		300	MHz
$C_{ob}$	Output Capacitance	$V_{CB} = 10V, I_E = 0, f = 1MHz$			6	pF
NF	Noise Figure	$I_C = 250\mu A, V_{CE} = 5V$ $R_S = 1K\Omega$ $f = 10Hz \text{ to } 15.7KHz$			10	dB

\* Pulse Test: Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2\%$

# Package Dimensions

## TO-92



Dimensions in Millimeters

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