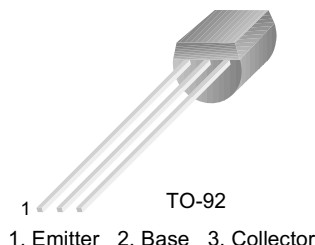


Amplifier Transistor

- 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

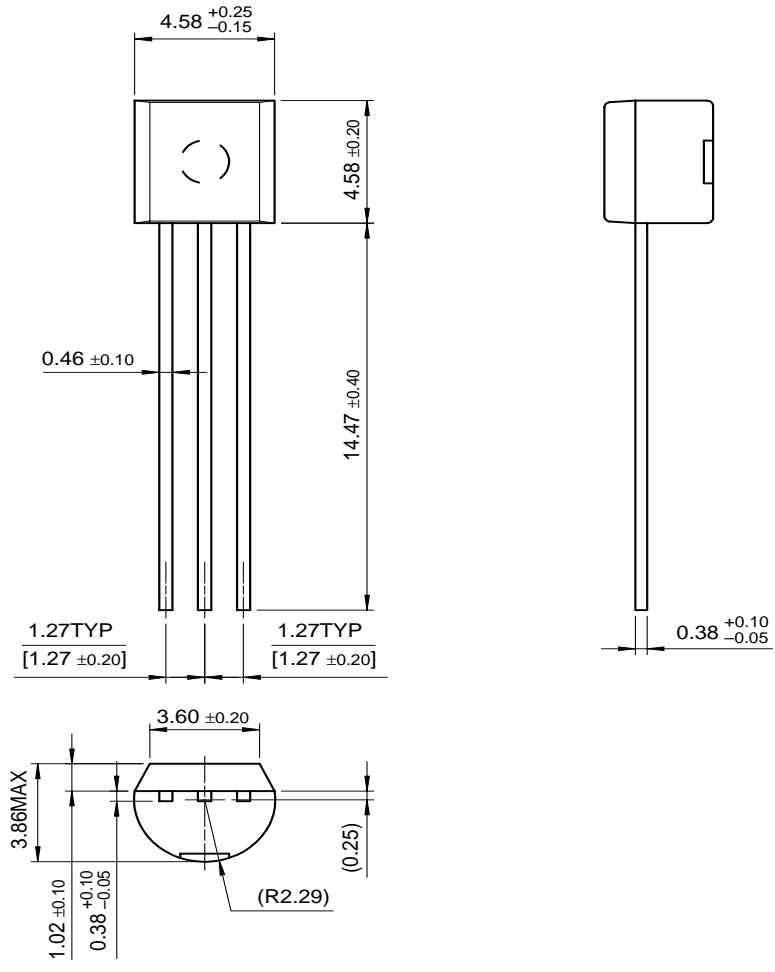
Electrical Characteristics $T_a = 25^\circ C$ unless otherwise noted

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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