



**THE DATASHEET OF
2N6428ABU**

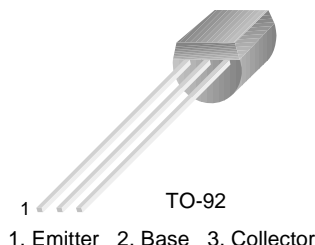


2N6428/6428A

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Amplifier Transistor

- Collector-Emitter Voltage: $V_{CE0} = 50V$
- Collector Dissipation: $P_C (\text{max}) = 625mW$



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	200	mA
P_C	Collector Dissipation	625	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

• Refer to 2N5088 for graphs

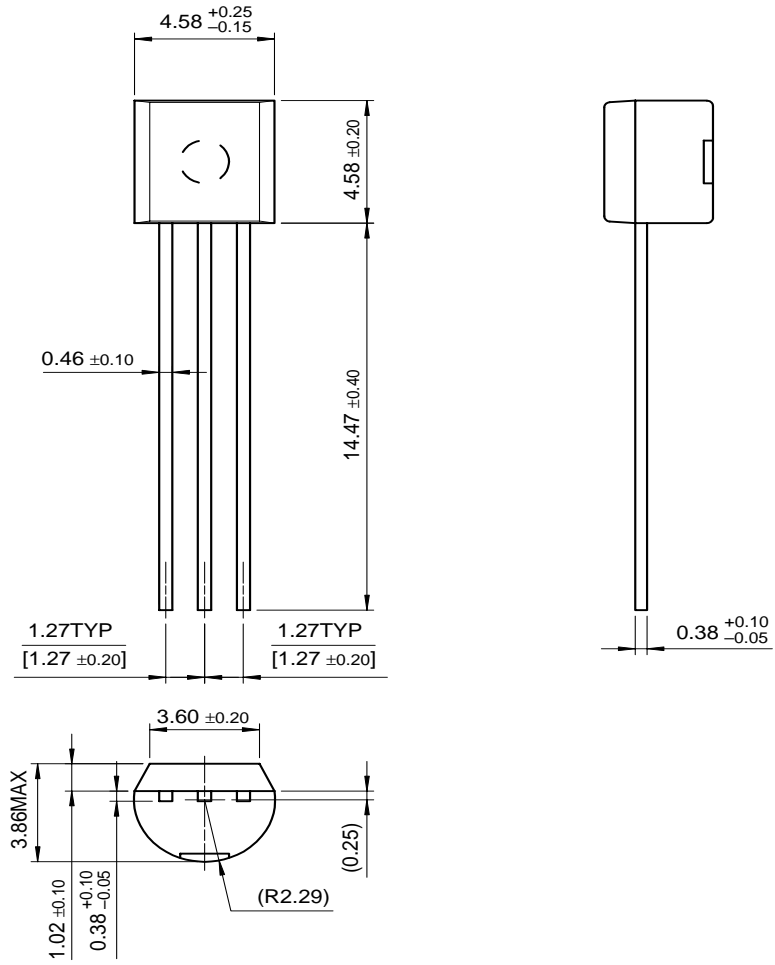
Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = 100\mu\text{A}, I_E = 0$	60			V
BV_{CEO}	* Collector-Emitter Breakdown Voltage	$I_C = 1\text{mA}, I_B = 0$	50			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = 30V, I_E = 0$			10	nA
I_{CEO}	Collector Cut-off Current	$V_{CE} = 30V, I_B = 0$			25	nA
I_{EBO}	Emitter Cut-off Current	$V_{BE} = 5V, I_C = 0$			10	nA
h_{FE}	* DC Current Gain	$V_{CE} = 5V, I_C = 10\mu\text{A}$ $V_{CE} = 5V, I_C = 100\mu\text{A}$ $V_{CE} = 5V, I_C = 1\text{mA}$ $V_{CE} = 5V, I_B = 10\text{mA}$	250 250 250 250		650	
$V_{CE} (\text{sat})$	* Collector-Emitter Saturation Voltage	$I_C = 10\text{mA}, I_B = 0.5\text{mA}$ $I_C = 100\text{mA}, I_B = 5\text{mA}$			0.2 0.6	V V
$V_{BE} (\text{on})$	Base-Emitter On Voltage	$I_C = 1\text{mA}, V_{CE} = 5V$	0.56		0.66	V
C_{ob}	Output Capacitance	$V_{CB} = 10V, I_E = 0, f = 1\text{MHz}$			3	pF
f_T	Current Gain Bandwidth Product	$V_{CE} = 5V, I_C = 1\text{mA}, f = 100\text{MHz}$	100		700	MHz
NF/NV	Noise Figure/Noise Voltage Level	$V_{CE} = 5V, I_C = 100\mu\text{A}$ (1) $R_S = 10K\Omega, B_W = 1\text{Hz}$ $f = 100\text{Hz}$ (2) $R_S = 50K\Omega, B_W = 15.7\text{Hz}$ $f = 10\text{Hz} - 10\text{KHz}$ (3) $R_S = 500\Omega, B_W = 1\text{Hz}$ $f = 10\text{Hz}$			3/18.1 2/16.2 6/5.7 4/4.6 3.5/4.3 3/4.1	dB/nV dB/nV dB/nV dB/nV dB/nV dB/nV

Package Dimensions

2N6428/6428A

TO-92



Dimensions in Millimeters

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