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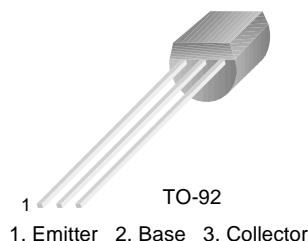
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



## 2N6428/6428A

### Amplifier Transistor

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



### NPN Epitaxial Silicon Transistor

#### Absolute Maximum Ratings $T_a = 25^\circ C$ 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	$^\circ C$
$T_{STG}$	Storage Temperature	-55 ~ 150	$^\circ C$

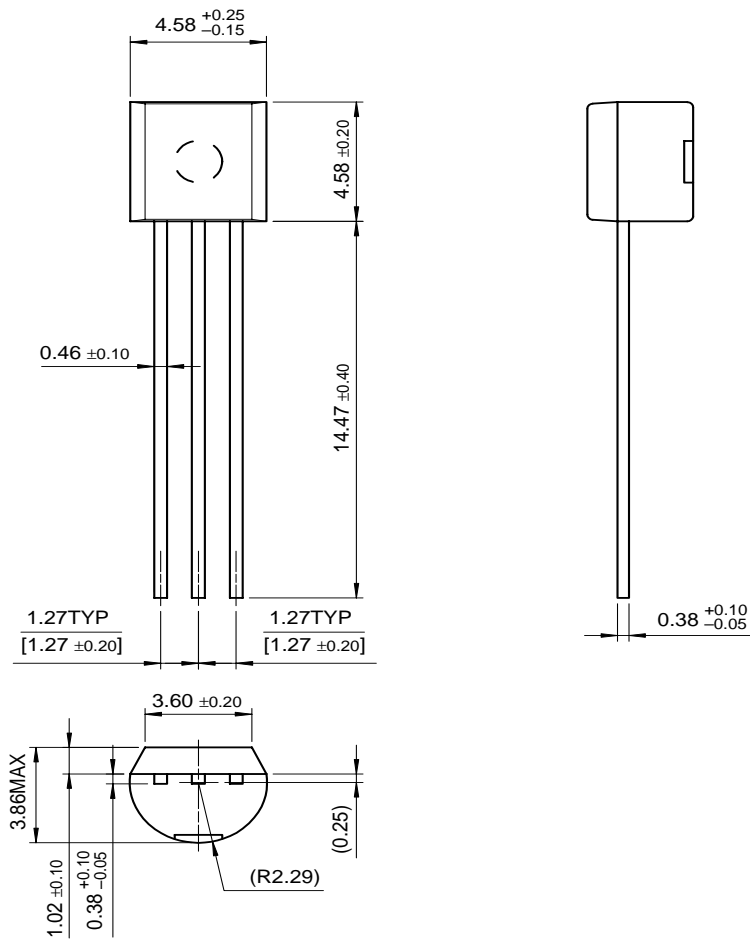
• Refer to 2N5088 for graphs

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

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

### Package Dimensions

### TO-92



Dimensions in Millimeters

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