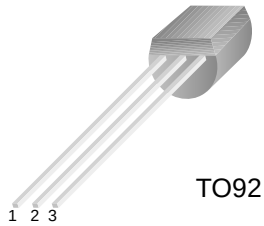
FAIRCHILD SEMICONDUCTOR®

December 2006

2N6428A
NPN Epitaxial Silicon Transistor

Features

- This device is designed for high gain, general purpose amplifier applications at collector currents from 1uA to 200 mA.



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1 2 3

1. Emitter 2. Base 3. Collector

Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current - Continuous	200	mA
P_D	Total Device Dissipation	625	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature Range	- 55 ~ 150	°C

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:
1) These ratings are based on a maximum junction temperature of 150 degrees C.
2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations

Electrical Characteristics* T_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = 100μA, I_E = 0	60		V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = 1mA, I_B = 0	50		V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = 100μA, I_C = 0	5		V
I_{CBO}	Collector Cut-off Current	V_{CB} = 30V, I_E = 0		10	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 = 0.01mA V_{CE} = 5V, I_C = 0.1mA V_{CE} = 5V, I_C = 1.0mA V_{CE} = 5V, I_C = 10mA	250 250 250 250	 650 650	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C = 10mA, I_B = 0.5mA I_C = 100mA, I_B = 5.0mA	0.2 0.6		V V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE} = 5V, I_C = 1.0mA	0.56	0.66	V
f_T	Current Gain Bandwidth Product	I_C = 1mA, V_{CE} = 5.0V, f = 100MHz	100	700	MHz
C_{ob}	Output Capacitance	V_{CB} = 10V, I_E = 0, f = 1MHz		3	pF

* DC Item are tested by Pulse Test: Pulse Width≤300us, Duty Cycle≤2%

Package Dimensions

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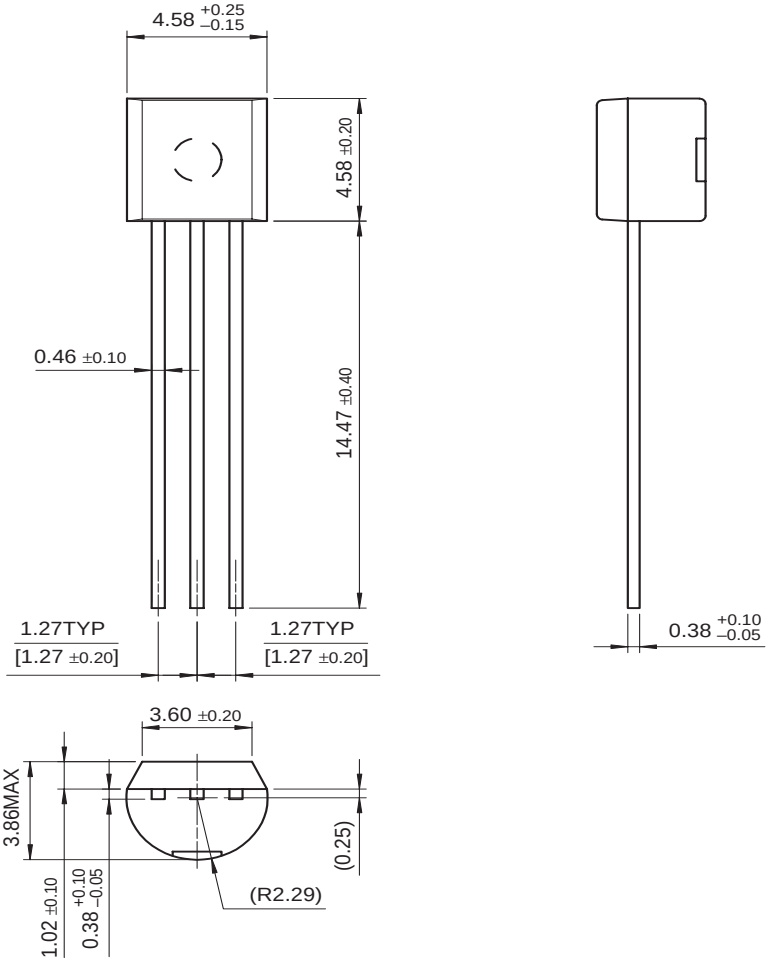

Dimensions in Millimeters

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Rev. I22