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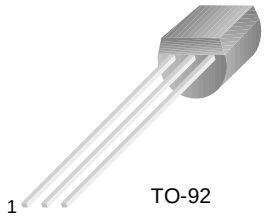
2N3702

PNP General Purpose Amplifier

- This device designed for use as general purpose amplifier and switches requiring collector currents to 300mA.
- Sourced from Process 68.
- See PN200 for Characteristics.



TO-92

1. Emitter 2. Collector 3. Base

PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{CBO}	Collector-Base Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current - Continuous	-500	mA
T_J, T_{ST}	Operating and Storage Junction 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_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
Off Characteristics						
$BV_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C = -10mA, I_B = 0	-25			V
$BV_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C = -100µA, I_E = 0	-40			V
$BV_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E = -100µA, I_C = 0	-5.0			V
I_{CBO}	Collector Cut-off Current	V_{CB} = -20V, I_E = 0			-100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = -3.0V, I_C = 0			-100	nA
On Characteristics *						
h_{FE}	DC Current Gain	V_{CE}= -5.0V, I_C = -50mA	60		300	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = -50mA, I_B = -5.0mA			-0.25	V
V_{BE}(sat)	Base-Emitter Saturation Voltage	V_{CE}= -5.0V, I_C = -50mA	-0.6		-1.0	V
Small Signal Characteristics						
C_{ob}	Current Gain Bandwidth Product	V_{CB} = -10V, f = 1.0MHz			12	pF
f_T	Output Capacitance	I_E = -50mA, V_{CE} = -5.0V	100			MHz

* Pulse Test: Pulse ≤ 300µs, Duty Cycle ≤ 2.0%

Thermal Characteristics T_A=25°C unless otherwise noted

Symbol	Parameter	Max.	Units
P_D	Total Device Dissipation Derate above 25°C	625 5.0	mW mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	83.3	°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	°C/W

Package Dimensions

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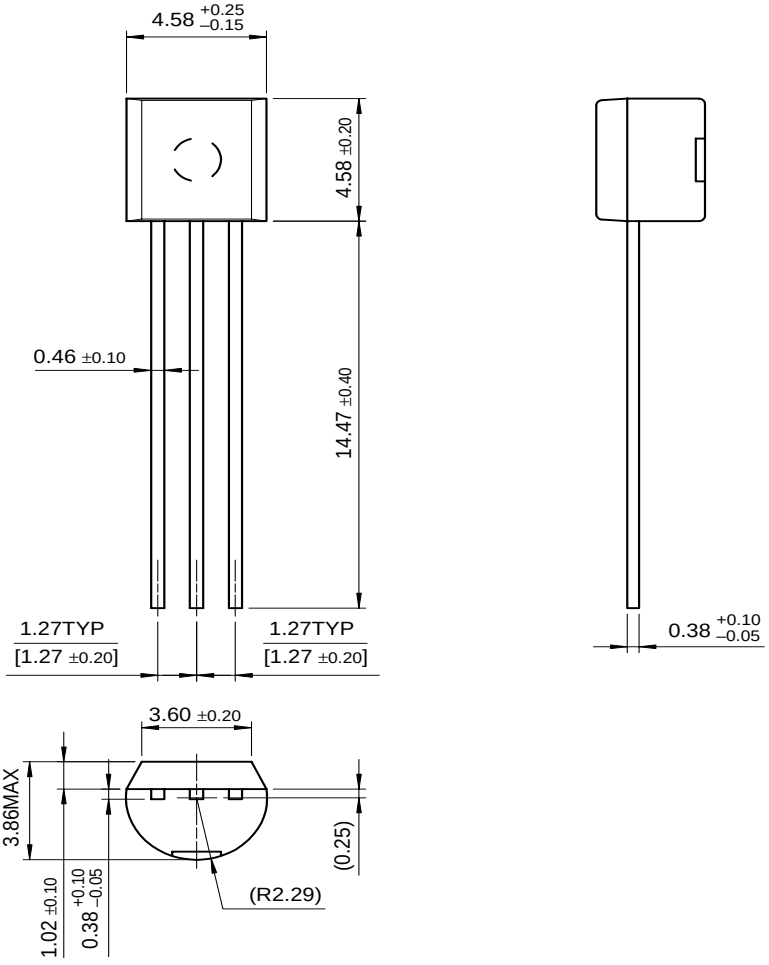

Dimensions in Millimeters

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CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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