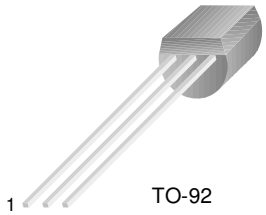
FAIRCHILD
SEMICONDUCTOR®

2N5366

PNP General Purpose Amplifier

- This device is designed for general purpose amplifiers applications at collector currents to 300mA.
- Sourced from process 68.



TO-92

1. Emitter 2. Collector 3. Base

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	40	V
V_{CBO}	Collector-Base Voltage	40	V
V_{EBO}	Emitter-Base Voltage	4.0	V
I_C	Collector current - Continuous	500	mA
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-55 ~ +150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

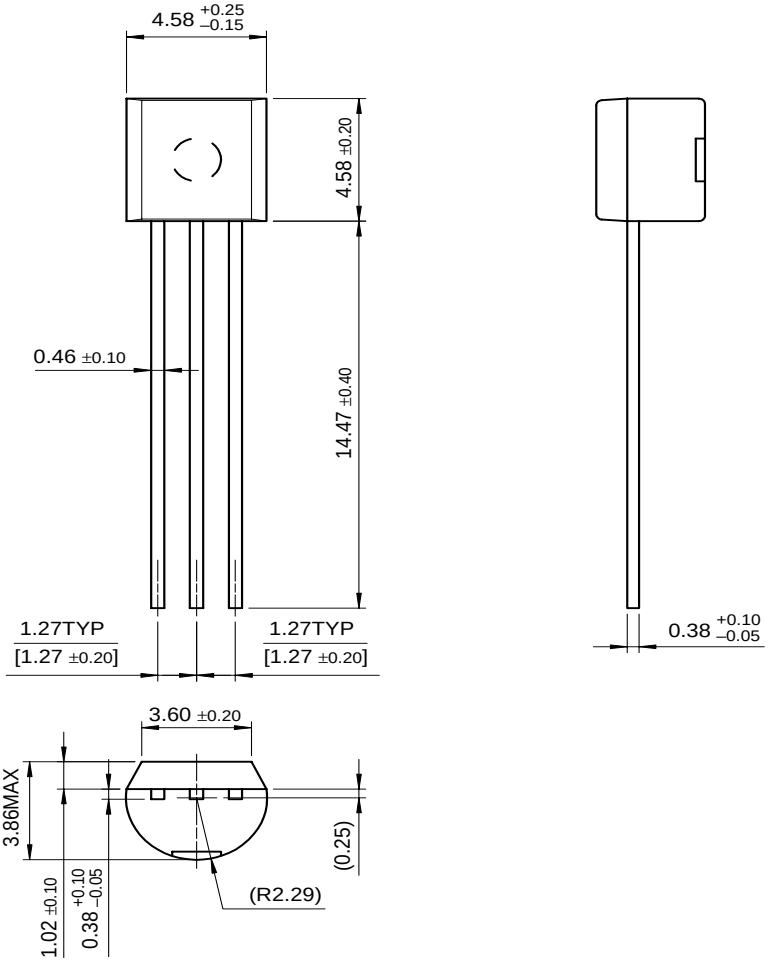
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
V_{CBO}	Collector-Base Breakdown Voltage	I_C = 10μA	40			V
V_{CEO}	Collector-Emitter Breakdown Voltage	I_C = 10mA	40			V
V_{EBO}	Emitter-Base Breakdown Voltage	I_C = 10μA	4.0			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 40V			100	nA
I_{CES}	Collector Cut-off Current	V_{CB} = 40V			100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 4.0V			10	μA
h_{FE}	DC Current Gain	V_{CE} = 10V, I_C = 2.0mA V_{CE} = 1.0V, I_C = 50mA V_{CE} = 5.0V, I_C = 300mA	80 100 40		 300	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 50mA, I_B = 2.5mA I_C = 300mA, I_B = 30mA			0.25 1.0	V
V_{BE}(sat)	Collector-Emitter Saturation Voltage	I_C = 50mA, I_B = 2.5mA I_C = 300mA, I_B = 30mA			1.1 2.0	
V_{BE}(on)	Base-Emitter On Voltage	V_{CE} = 10V, I_C = 2.0mA	0.5		0.8	V
C_{ob}	Output Capacitance	V_{CB} = 10V, f = 1MHz			8.0	pF
C_{ib}	Input Capacitance	V_{CB} = 0.5V, f = 1MHz			35	pF
h_{fe}	Small-Signal Current Gain	V_{CE} = 10V, I_C = 2.0mA, f = 1MHz	80	450		

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
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	°C/W

Package Dimensions

TO-92



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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