



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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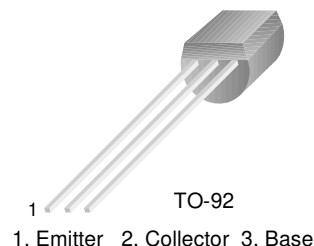


## 2N5366

2N5366

### PNP General Purpose Amplifier

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



### Absolute Maximum Ratings $T_C=25^\circ\text{C}$ 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	$^\circ\text{C}$

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

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

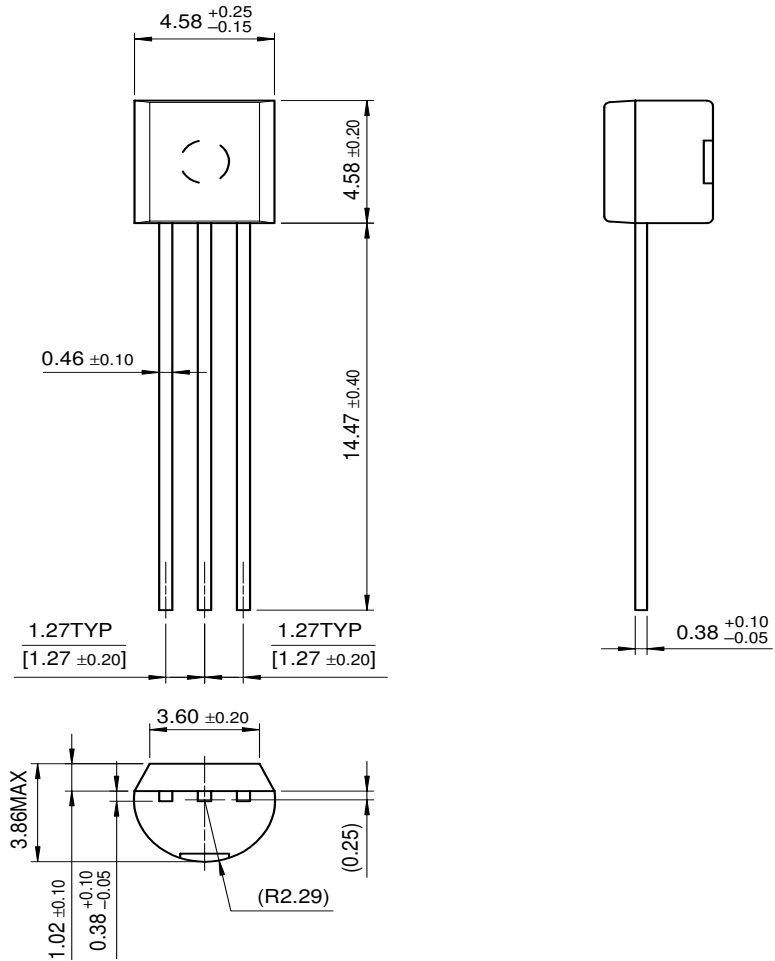
### Thermal Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

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

# Package Dimensions

2N5366

## TO-92



Dimensions in Millimeters

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CoolFET™	FAST <sub>r</sub> ™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOL™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
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EnSigna™	I <sup>2</sup> C™	OCX™	RapidConfigure™	UHC™
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Datasheet Identification	Product Status	Definition
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CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
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