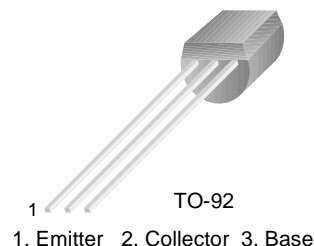


PNP General Purpose Amplifier

- 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	μA
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°C	625 5.0	mW mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	$^\circ\text{C/W}$

Package Dimensions

TO-92



Dimensions in Millimeters

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CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
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