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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.

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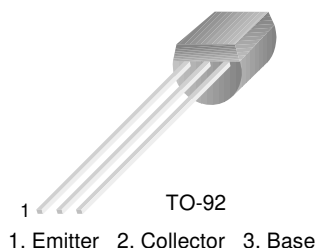
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



FJN3313R

Switching Application (Bias Resistor Built In)

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor ($R_1 = 2.2K\Omega$, $R_2 = 47K\Omega$)
- Complement to FJN4313R

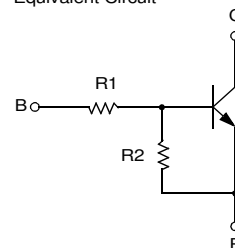


NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current	100	mA
P_C	Collector Power Dissipation	300	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

Equivalent Circuit

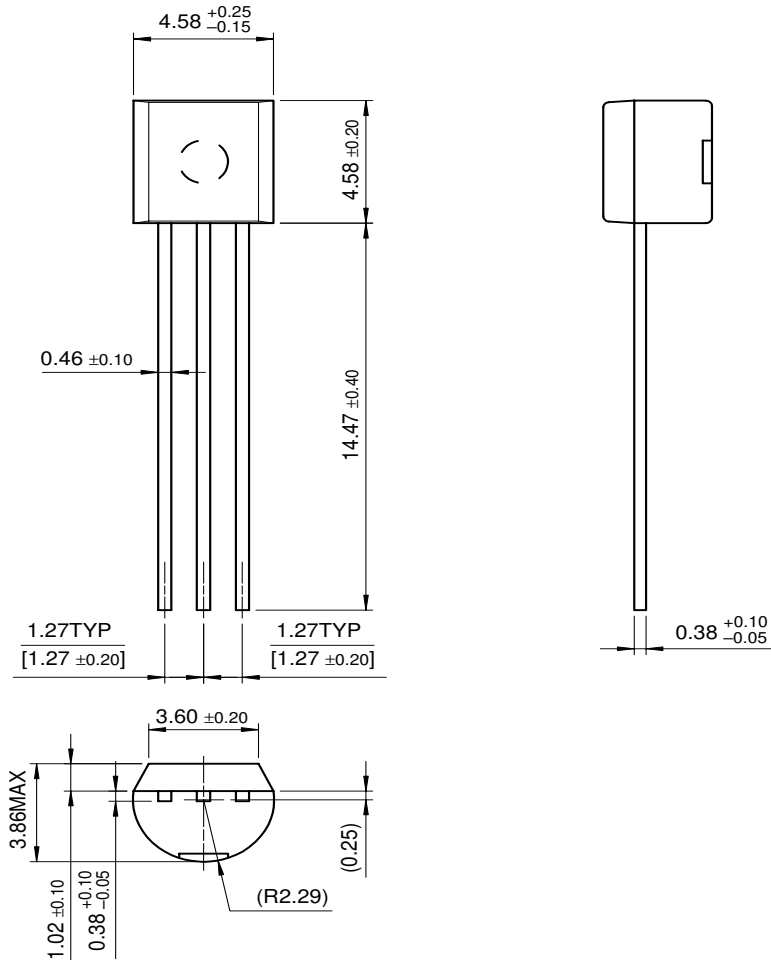


Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = 10\mu\text{A}$, $I_E = 0$	50			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = 100\mu\text{A}$, $I_B = 0$	50			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = 40\text{V}$, $I_E = 0$			0.1	μA
h_{FE}	DC Current Gain	$V_{CE} = 5\text{V}$, $I_C = 5\text{mA}$	68			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 10\text{mA}$, $I_B = 0.5\text{mA}$			0.3	V
f_T	Current Gain Bandwidth Product	$V_{CE} = 10\text{V}$, $I_C = 5\text{mA}$		250		MHz
C_{ob}	Output Capacitance	$V_{CB} = 10\text{V}$, $I_E = 0$ $f = 1.0\text{MHz}$		3.7		pF
$V_{I(off)}$	Input Off Voltage	$V_{CE} = 5\text{V}$, $I_C = 100\mu\text{A}$	0.5			V
$V_{I(on)}$	Input On Voltage	$V_{CE} = 0.2\text{V}$, $I_C = 5\text{mA}$			1.1	V
R_1	Input Resistor		1.5	2.2	2.9	$K\Omega$
R_1/R_2	Resistor Ratio		0.042	0.047	0.052	

Package Dimensions

TO-92



Dimensions in Millimeters

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