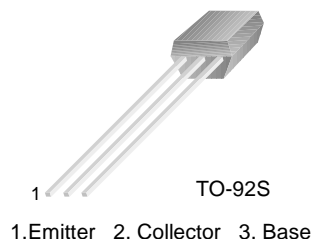


FJNS3212R

Switching Application (Bias Resistor Built In)

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor ($R=47K\Omega$)
- Complement to FJNS4212R

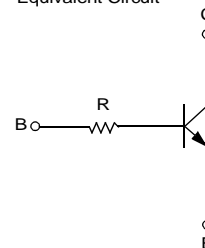


NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	5	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

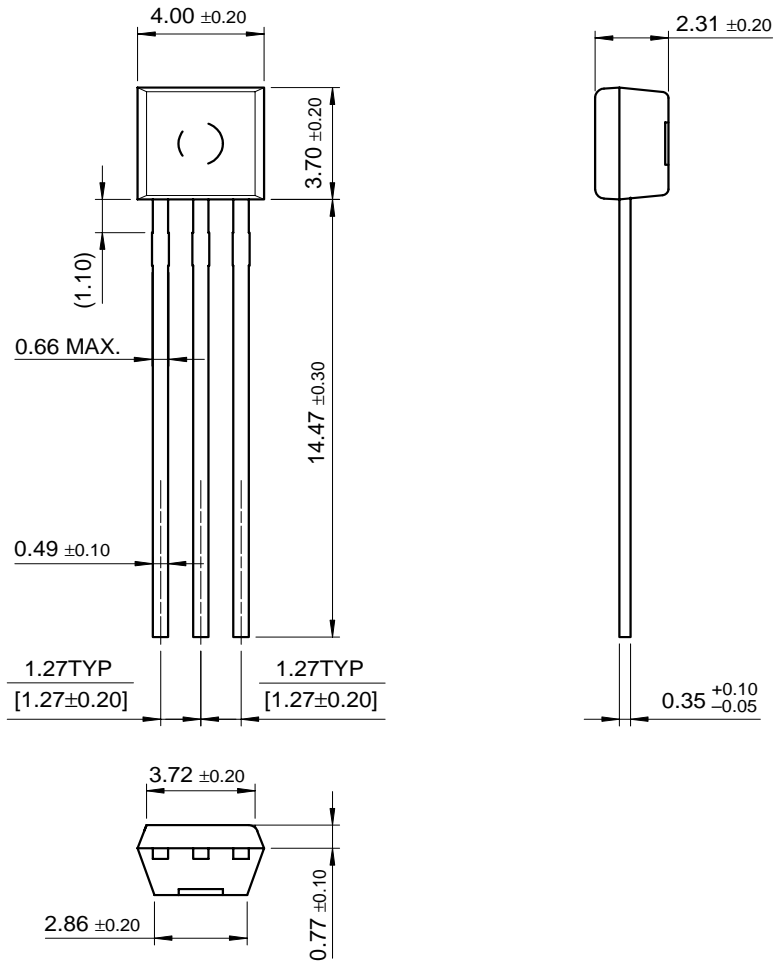


Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=100\mu\text{A}$, $I_E=0$	40			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_E=1\text{mA}$, $I_B=0$	40			V
I_{CBO}	Collector Cut-off Current	$V_{CB}=30\text{V}$, $I_E=0$			0.1	μA
h_{FE}	DC Current Gain	$V_{CE}=5\text{V}$, $I_C=1\text{mA}$	100		600	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=10\text{mA}$, $I_B=1\text{mA}$			0.3	V
C_{ob}	Output Capacitance	$V_{CB}=10\text{V}$, $I_E=0$ $f=1\text{MHz}$		3.7		pF
f_T	Current Gain Bandwidth Product	$V_{CE}=10\text{V}$, $I_C=5\text{mA}$		250		MHz
R	Input Resistor		32	47	62	K Ω

Package Dimensions

TO-92S



Dimensions in Millimeters

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

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FJNS3212R
 NPN Epitaxial Silicon Transistor

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Product status/pricing/packaging

Product	Product status	Pricing*	Inventory check & ordering	Package type	Leads	Packing method
FJNS3212RBU	Full Production	\$0.057	Purchase	TO-92S	3	BULK
FJNS3212RTA	Full Production	\$0.057	Purchase	TO-92S	3	TAPE REEL

* Fairchild 1,000 piece Budgetary Pricing

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