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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.

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!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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









## **FJNS3211R**

# Switching Application (Bias Resistor Built In) - Switching circuit, Inverter, Interface circuit, Driver Circuit

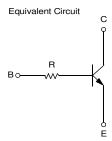
- Built in bias Resistor (R=22KΩ)
- Complement to FJNS4211R



# **NPN Epitaxial Silicon Transistor**

# **Absolute Maximum Ratings** $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	40	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current	100	mA
P <sub>C</sub>	Collector Power Dissipation	300	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C



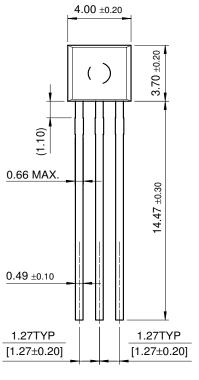
### **Electrical Characteristics** $T_a$ =25°C unless otherwise noted

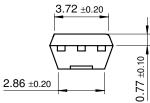
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	$I_{C}=100\mu A, I_{E}=0$	40			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>E</sub> =1mA, I <sub>B</sub> =0	40			V
I <sub>CBO</sub>	Collector Cut-off Current	$V_{CB} = 30V, I_{E} = 0$			0.1	μΑ
h <sub>FE</sub>	DC Current Gain	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	100		600	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA			0.3	V
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> =10V, I <sub>E</sub> =0 f=1MHz		3.7		pF
f <sub>T</sub>	Current Gain Bandwidth Product	$V_{CE}=10V$ , $I_{C}=5mA$		250		MHz
R	Input Resistor		15	22	29	ΚΩ

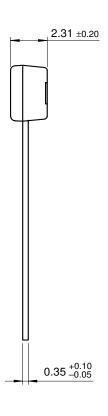


# FJNS3211R

**TO-92S** 







Dimensions in Millimeters

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E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I <sup>2</sup> C™	OCX™	RapidConfigure™	UHC™
Across the board.	Around the world.™	OCXPro™	RapidConnect™	UltraFET®
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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Rev. I1

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### **Definition of Terms**

Datasheet Identification	Product Status	Definition
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