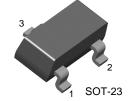


### **FJV3111R**

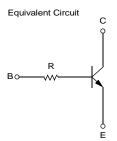
# Switching Application (Bias Resistor Built In) - Switching circuit, Inverter, Interface circuit, Driver Circuit

- Built in bias Resistor (R=22KΩ)
- Complement to FJV4111R



1. Base 2. Emitter 3. Collector





## **NPN Epitaxial Silicon Transistor**

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

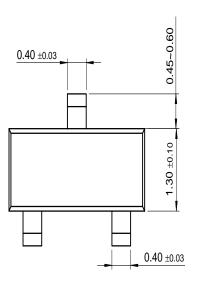
Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	40	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current	100	mA
P <sub>C</sub>	Collector Power Dissipation	200	mW
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C

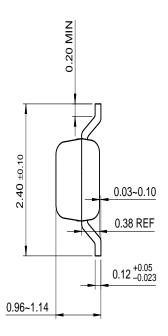
### **Electrical Characteristics** $T_a$ =25°C unless otherwise noted

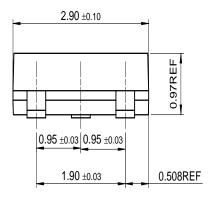
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	$I_C=100\mu A, I_E=0$	40			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>E</sub> =1mA, I <sub>B</sub> =0	40			V
I <sub>CBO</sub>	Collector Cut-off Current	$V_{CB}$ =30V, $I_{E}$ =0			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 <sub>CE</sub> =10V, I <sub>C</sub> =5mA		250		MHz
R	Input Resistor		15	22	29	KΩ

# **Package Dimensions**

# **SOT-23**







Dimensions in Millimeters

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CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	$I^2C^{TM}$	$OCX^{TM}$	RapidConfigure™	UHC™
Across the board.	. Around the world.™	OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	$VCX^{TM}$
Programmable Ad	ctive Droop™	OPTOPLANAR™	SMART START™	

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