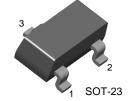


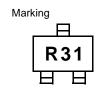
## **FJV3111R**

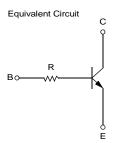
# Switching Application (Bias Resistor Built In) - Switching circuit, Inverter, Interface circuit, Driver Circuit

- 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

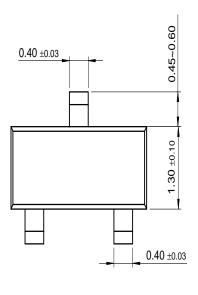
Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	40	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current	100	mA
P <sub>C</sub>	Collector Power Dissipation	200	mW
TJ	Junction Temperature	150	°C
T <sub>STG</sub>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

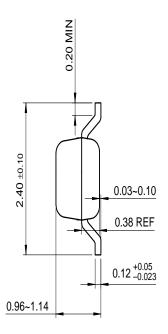
### **Electrical Characteristics** $T_a$ =25°C unless otherwise noted

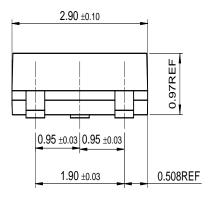
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	$I_C=100\mu A, I_E=0$	40			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>E</sub> =1mA, I <sub>B</sub> =0	40			V
I <sub>CBO</sub>	Collector Cut-off Current	$V_{CB}$ =30V, $I_{E}$ =0			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	ΚΩ

## **Package Dimensions**

## **SOT-23**







Dimensions in Millimeters

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$CROSSVOLT^{TM}$	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 <sup>TM</sup>
Programmable Ad	ctive Droop™	OPTOPLANAR™	SMART START™	

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#### **Definition of Terms**

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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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#### **FJV3111R**

NPN Epitaxial Silicon Transistor

#### **Contents**

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#### **Features**

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor (R=22KΩ)
- Complement to FJV4111R

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Product status/pricing/packaging

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Quality and reliability

Design center

Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
FJV3111RMTF	Full Production	Full Production	\$0.0269	SOT-23	3	TAPE REEL	Line 1: R31

<sup>\*</sup> Fairchild 1,000 piece Budgetary Pricing

<sup>\*\*</sup> A sample button will appear if the part is available through Fairchild's on-line samples program. If there is no sample button, please contact a Fairchild distributor to obtain samples



Indicates product with Pb-free second-level interconnect. For more information click here.

Package marking information for product FJV3111R is available. Click here for more information.

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**Qualification Support** 

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Product	
FJV3111RMTF	

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