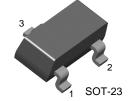


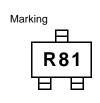
## **FJV4111R**

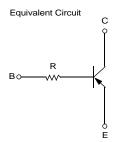
## Switching Application (Bias Resistor Built In)

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor (R=22KΩ)
- Complement to FJV3111R



1. Base 2. Emitter 3. Collector





## **PNP Epitaxial Silicon Transistor**

### Absolute Maximum Ratings Ta=25°C unless otherwise noted

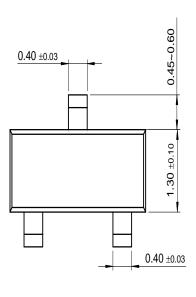
| Symbol           | Parameter                   | Value     | Units |
|------------------|-----------------------------|-----------|-------|
| V <sub>CBO</sub> | Collector-Base Voltage      | -40       | V     |
| $V_{CEO}$        | Collector-Emitter Voltage   | -40       | V     |
| V <sub>EBO</sub>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

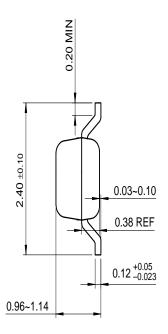
## **Electrical Characteristics** $T_a$ =25°C unless otherwise noted

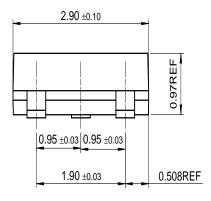
| Symbol                | Parameter                            | Test Condition                                      | Min. | Тур. | Max. | Units |
|-----------------------|--------------------------------------|---|------|------|------|-------|
| BV <sub>CBO</sub>     | Collector-Base Breakdown Voltage     | $I_C = -100 \mu A, I_E = 0$                         | -40  |      |      | V     |
| BV <sub>CEO</sub>     | Collector-Emitter Breakdown Voltage  | $I_E$ = -1mA, $I_B$ =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                      | $V_{CE}$ = -5V, $I_{C}$ = -1mA                      | 100  |      | 600  |       |
| V <sub>CE</sub> (sat) | Collector-Emitter Saturation Voltage | $I_C$ = -10mA, $I_B$ = -1mA                         |      |      | -0.3 | V     |
| C <sub>ob</sub>       | Output Capacitance                   | V <sub>CB</sub> = -10V, I <sub>E</sub> =0<br>f=1MHz |      | 5.5  |      | pF    |
| f <sub>T</sub>        | Current Gain Bandwidth Product       | $V_{CE}$ = -10V, $I_{C}$ = -5mA                     |      | 200  |      | MHz   |
| R                     | Input Resistor                       |   | 15   | 22   | 29   | ΚΩ    |

# **Package Dimensions**

# **SOT-23**







Dimensions in Millimeters

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|----------------------------|----------------------|------------------------|--------------------------|-----------------------|
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| Bottomless™                | FAST <sup>®</sup>    | LittleFET™             | Power247™                | SuperSOT™-3           |
| CoolFET™                   | FASTr™               | MicroFET™              | PowerTrench <sup>®</sup> | SuperSOT™-6           |
| CROSSVOLT™                 | FRFET™               | MicroPak™              | QFET™                    | SuperSOT™-8           |
| DOME™                      | GlobalOptoisolator™  | MICROWIRE™             | $QS^{TM}$                | SyncFET™              |
| 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 Active Droop™ |                      | OPTOPLANAR™            | SMART START™             |                       |

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|--------------------------|---------------------------|---|
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