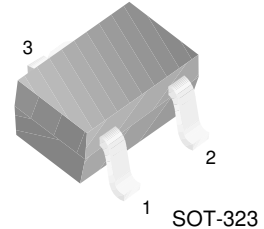


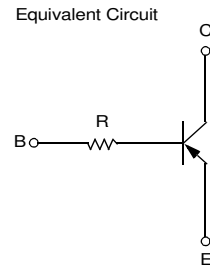
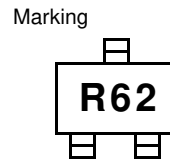
FJX4012R

Switching Application (Bias Resistor Built In)

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor ($R=47K\Omega$)
- Complement to FJX3012R



1. Base 2. Emitter 3. Collector



PNP 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 | 200 | mW |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature | -55 ~ 150 | $^\circ\text{C}$ |

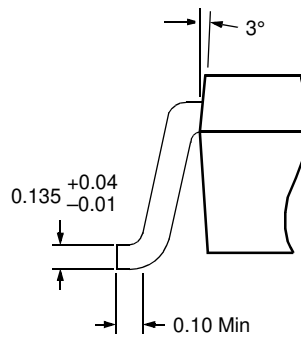
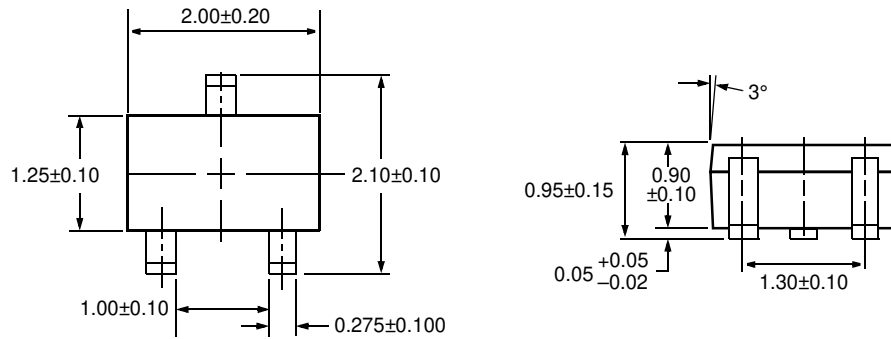
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

| 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 | $I_C = -1\text{mA}, I_B = 0$ | -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 | $V_{CB} = -10\text{V}, I_E = 0$ $f = 1\text{MHz}$ | | 5.5 | | pF |
| f_T | Current Gain Bandwidth Product | $V_{CE} = -10\text{V}, I_C = -5\text{mA}$ | | 200 | | MHz |
| R | Input Resistor | | 32 | 47 | 62 | $K\Omega$ |

Package Dimensions

FJX4012R

SOT-323



Dimensions in Millimeters

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| | | | | |
|---|----------------------------------|---------------------------------|----------------------------------|------------------------------|
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| ActiveArray TM | FACT Quiet series TM | ISOPLANAR TM | POP TM | Stealth TM |
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| CoolFET TM | FAST ^r TM | MicroFET TM | PowerTrench [®] | SuperSOT TM -6 |
| CROSSVOL TM | FRFET TM | MicroPak TM | QFET TM | SuperSOT TM -8 |
| DOME TM | GlobalOptoisolator TM | MICROWIRE TM | QS TM | SyncFET TM |
| EcoSPARK TM | GTO TM | MSX TM | QT Optoelectronics TM | TinyLogic TM |
| E ² CMOS TM | HiSeC TM | MSXPro TM | Quiet Series TM | TruTranslation TM |
| EnSigna TM | I ² C TM | OCX TM | RapidConfigure TM | UHC TM |
| Across the board. Around the world. TM | | OCXPro TM | RapidConnect TM | UltraFET [®] |
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PRODUCT STATUS DEFINITIONS

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