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## Contact us

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

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

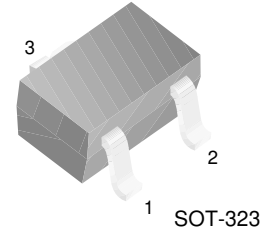
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# FJX4013R

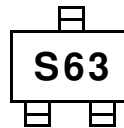
## Switching Application (Bias Resistor Built In)

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor ( $R_1=2.2K\Omega$ ,  $R_2=47K\Omega$ )
- Complement to FJX3013R

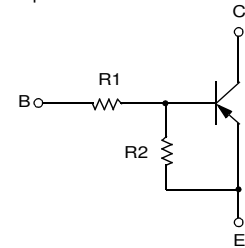


1. Base 2. Emitter 3. Collector

Marking



Equivalent Circuit



## PNP Epitaxial Silicon Transistor

**Absolute Maximum Ratings**  $T_a=25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$V_{CB0}$	Collector-Base Voltage	-50	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-10	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	$^\circ\text{C}$

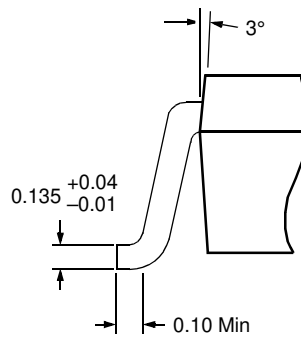
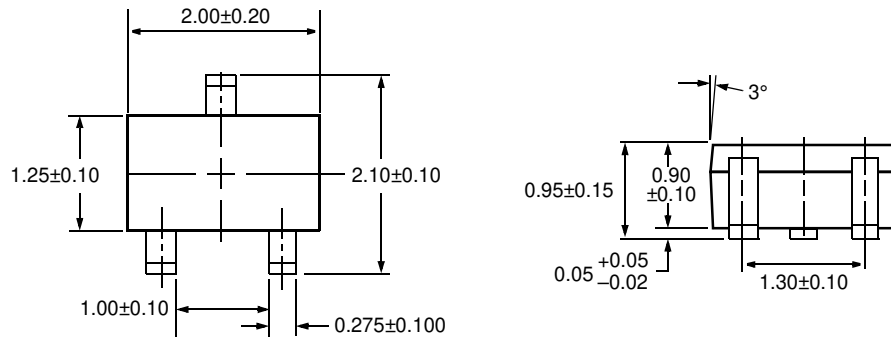
**Electrical Characteristics**  $T_a=25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CB0}$	Collector-Base Breakdown Voltage	$I_C = -10\mu\text{A}$ , $I_E = 0$	-50			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -100\mu\text{A}$ , $I_B = 0$	-50			V
$I_{CB0}$	Collector Cutoff Current	$V_{CB} = -40\text{V}$ , $I_E = 0$			-0.1	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$V_{CE} = -5\text{V}$ , $I_C = -5\text{mA}$	68			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -10\text{mA}$ , $I_B = -0.5\text{mA}$			-0.3	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = -10\text{V}$ , $I_C = -5\text{mA}$		200		MHz
$C_{ob}$	Output Capacitance	$V_{CB} = -10\text{V}$ , $I_E = 0$ $f = 1.0\text{MHz}$		5.5		pF
$V_I(\text{off})$	Input Off Voltage	$V_{CE} = -5\text{V}$ , $I_C = -100\mu\text{A}$	-0.5			V
$V_I(\text{on})$	Input On Voltage	$V_{CE} = -0.2\text{V}$ , $I_C = -10\text{mA}$			-1.1	V
$R_1$	Input Resistor		1.5	2.2	2.9	$K\Omega$
$R_1/R_2$	Resistor Ratio		0.042	0.047	0.052	

# Package Dimensions

FJX4013R

## SOT-323



Dimensions in Millimeters

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Bottomless™	FAST®	LittleFET™	Power247™	SuperSOT™-3
CoolFET™	FAST <sub>r</sub> ™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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