



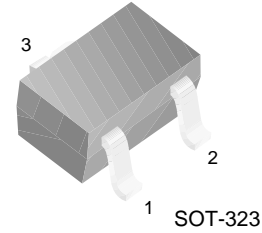
**THE DATASHEET OF
FJX4008RTF**



FJX4008R

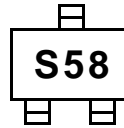
Switching Application (Bias Resistor Built In)

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor ($R_1=47K\Omega$, $R_2=22K\Omega$)
- Complement to FJX3008R

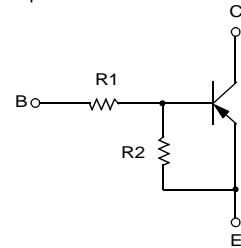


1. Base 2. Emitter 3. Collector

Marking



Equivalent Circuit



PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	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_{CBO}	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_{CBO}	Collector Cut-off Current	$V_{CB} = -40\text{V}$, $I_E = 0$			-0.1	μA
h_{FE}	DC Current Gain	$V_{CE} = -5\text{V}$, $I_C = -5\text{mA}$	56			
$V_{CE(sat)}$	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
$V_I(off)$	Input Off Voltage	$V_{CE} = -5\text{V}$, $I_C = -100\mu\text{A}$	-0.8			V
$V_I(on)$	Input On Voltage	$V_{CE} = -0.3\text{V}$, $I_C = -2\text{mA}$			-4	V
R_1	Input Resistor		32	47	62	$K\Omega$
R_1/R_2	Resistor Ratio		1.9	2.1	2.4	

Typical Characteristics

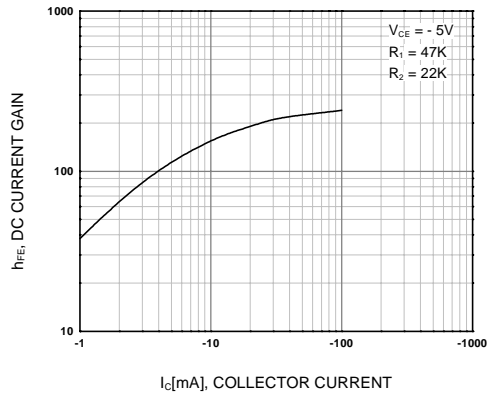


Figure 1. DC current Gain

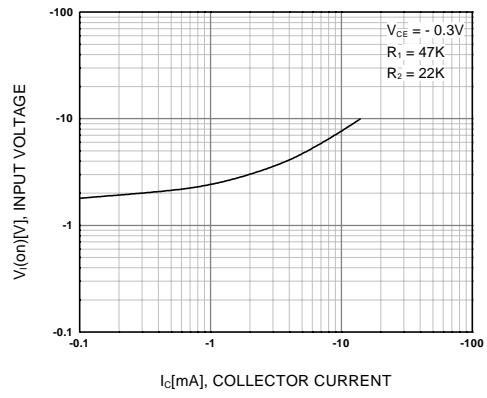


Figure 2. Input On Voltage

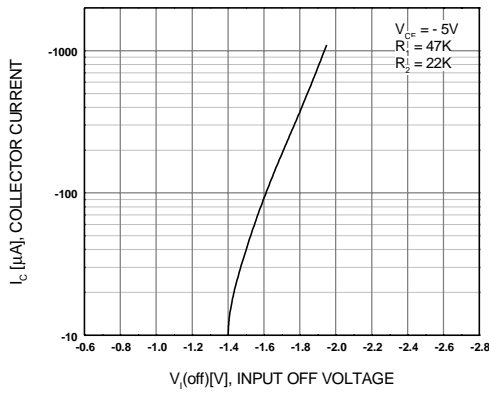


Figure 3. Input Off Voltage

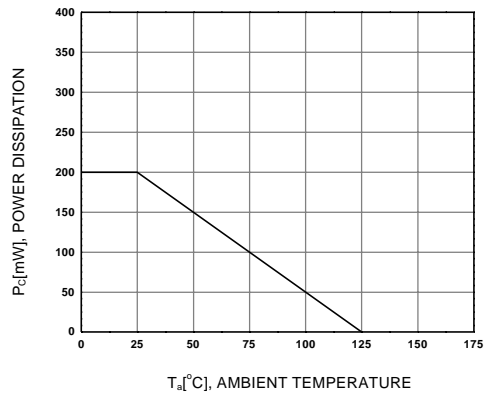
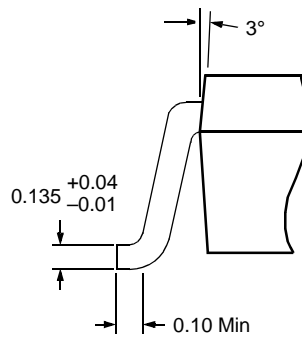
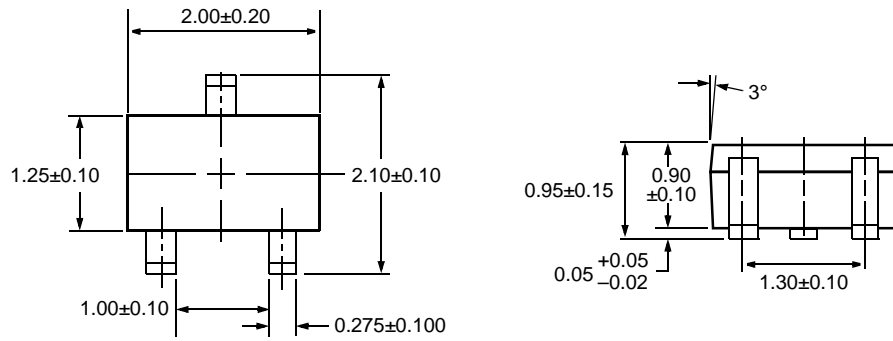


Figure 4. Power Derating

Package Dimensions

FJX4008R

SOT-323



Dimensions in Millimeters

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