

FJN4306R

Switching Application (Bias Resistor Built In)

- Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor ($R_1=10K\Omega$, $R_2=47K\Omega$)
- Complement to FJN3306R

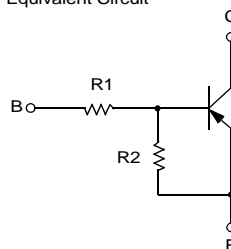


PNP Epitaxial Silicon Transistor

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

Equivalent Circuit



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	$V_{CE} = -5\text{V}$, $I_C = -5\text{mA}$	68			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -10\text{mA}$, $I_B = -0.5\text{mA}$			-0.3	V
C_{ob}	Output Capacitance	$V_{CB} = -10\text{V}$, $I_E = 0$ $f = 1.0\text{MHz}$		5.5		pF
f_T	Current Gain Bandwidth Product	$V_{CE} = -10\text{V}$, $I_C = -5\text{mA}$		200		MHz
$V_{I(off)}$	Input Off Voltage	$V_{CE} = -5\text{V}$, $I_C = -100\mu\text{A}$	-0.3			V
$V_{I(on)}$	Input On Voltage	$V_{CE} = -0.3\text{V}$, $I_C = -1\text{mA}$			-1.4	V
R_1	Input Resistor		7	10	13	$K\Omega$
R_1/R_2	Resistor Ratio		0.19	0.21	0.24	

Typical Characteristics

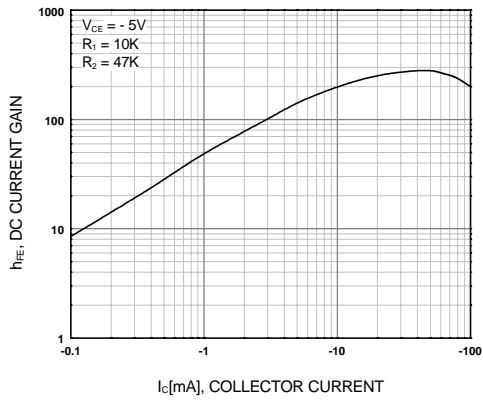


Figure 1. DC current Gain

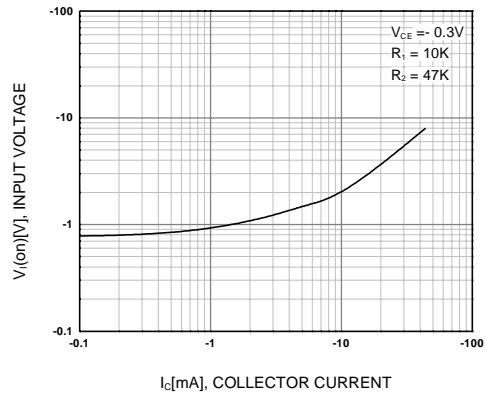


Figure 2. Input On Voltage

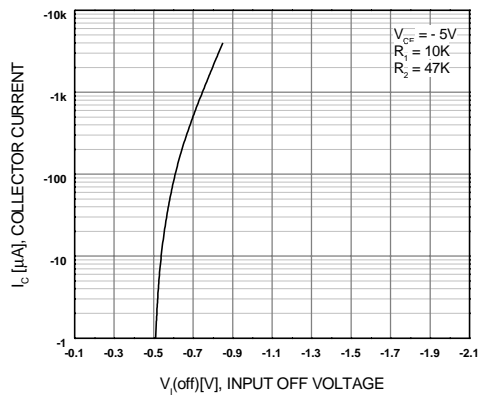


Figure 3. Input Off Voltage

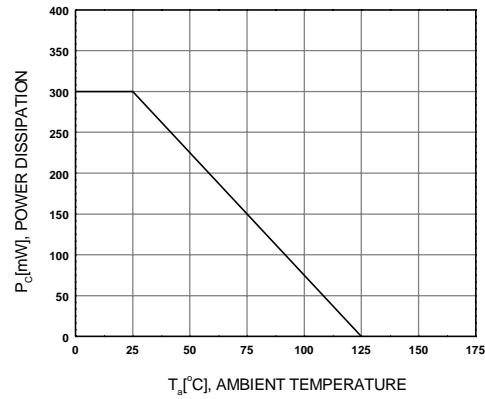


Figure 4. Power Derating

Package Dimensions

FJN4306R

TO-92



Dimensions in Millimeters

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Product status/pricing/packaging

Product	Product status	Pricing*	Inventory check & ordering	Package type	Leads	Packing method
FJN4306RTA	Full Production	\$0.053	Purchase	TO-92	3	TAPE REEL
FJN4306RBU	Full Production	\$0.053	Purchase	TO-92	3	BULK

* Fairchild 1,000 piece Budgetary Pricing

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