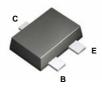


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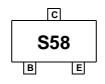
# FJY4008R PNP Epitaxial Silicon Transistor

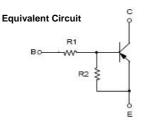
## **Features**

- · Switching circuit, Inverter, Interface circuit, Driver Circuit
- Built in bias Resistor ( $R_1$ =47K $\Omega$ ,  $R_2$ =22K $\Omega$ )
- Complement to FJY3008R









# Absolute Maximum Ratings \* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-50	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-50	V
V <sub>EBO</sub>	Emitter-Base Voltage	-10	V
I <sub>C</sub>	Collector Current	-100	mA
T <sub>STG</sub>	Storage Temperature Range	-55~150	°C
T <sub>J</sub>	Junction Temperature	150	°C
P <sub>C</sub>	Collector Power Dissipation, by $R_{\theta JA}$	200	mW

<sup>\*</sup> These ratings are limiting values above which the serviceability of any semiconductor device may by impaired.

# Thermal Characteristics\* Ta=25°C unless otherwise noted

Symbol	Parameter	Max	Units	
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	600	°C/W	

<sup>\*</sup> Minimum land pad size.

# Electrical Characteristics\* T<sub>C</sub> = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	MIN	Тур	MAX	Units
V <sub>(BR)</sub> CBO	Collector-Base Breakdown Voltage	Ic = -10 uA, IE = 0	-50			V
V <sub>(BR)</sub> CEO	Collector-Emitter Breakdown Voltage	Ic = -100 uA, I <sub>B</sub> = 0	-50			V
Ісво	Collector-Cutoff Current	Vcb = -40 V, IE = 0			-0.1	uA
hfE	DC Current Gain	Vce = -5 V, Ic = -5mA	68			
Vce(sat)	Collector-Emitter Saturation Voltage	Ic = -10 mA, I <sub>B</sub> = -0.5 mA			-0.3	V
f⊤	Current Gain - Bandwidth Product	Vce = -10V, Ic = -5 mA		200		MHz
Ccb	Output Capacitance	Vcb = -10 V, IE = 0, f = 1.0 MHz		5.5		pF
Vı(off)	Input Off Voltage	Vce = -5 V, Ic = -100uA	-0.4			V
V <sub>I</sub> (on)	Input On Voltage	Vce = -0.3V, Ic = -2mA			-2.5	V
R <sub>1</sub>	Input Resistor		15	22	29	ΚΩ
R <sub>1</sub> /R <sub>2</sub>	Resistor Ratio		0.42	0.47	0.52	

<sup>\*</sup> Pulse Test: PW≤300μs, Duty Cycle≤2%

# **Typical Performance Characteristics**

Figure 1. DC current Gain

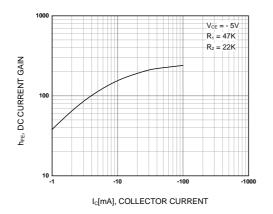


Figure 2. Input On Voltage

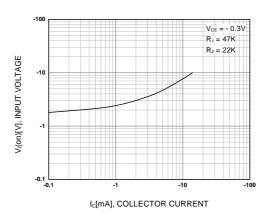


Figure 3. Input off Voltage

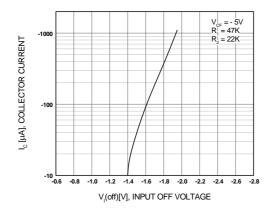
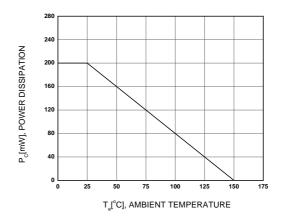
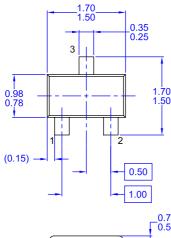


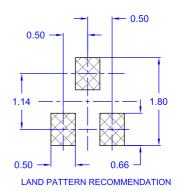
Figure 4. Power Derating

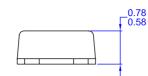


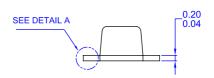
# **Package Dimensions**

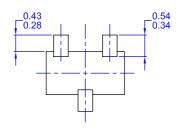
# **SOT-523F**

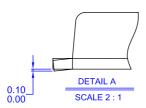












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Dimensions in Millimeters



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