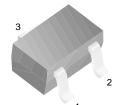


## **FJX2907A**

### **General Purpose Transistor**



SOT-323

1. Base 2. Emitter 3. Collector

## **PNP Epitaxial Silicon Transistor**

### **Absolute Maximum Ratings** $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-60	V
V <sub>CES</sub>	Collector-Emitter Voltage	-60	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
Ic	Collector Current	-600	mA
P <sub>C</sub>	Collector Power Dissipation	325	mW
T <sub>STG</sub>	Storage Temperature	150	°C

### **Electrical Characteristics** $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -10μA, I <sub>E</sub> =0	-60		V
BV <sub>CEO</sub>	* Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA, I <sub>B</sub> =0	-60		V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	$I_E = -10\mu A, I_C = 0$	-5		V
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> = -50V, I <sub>E</sub> =0		-0.01	μΑ
h <sub>FE</sub>	DC Current Gain	$V_{CE}$ = -10V, $I_{E}$ = -0.1mA $V_{CE}$ = -10V, $I_{C}$ = -1.0mA $V_{CE}$ = -10V, $I_{C}$ = -10mA $V_{CE}$ = -10V, $I_{C}$ = -150mA $V_{CE}$ = -10V, $I_{C}$ = -500mA	75 100 100 100 50	300	
V <sub>CE</sub> (sat)	* Collector-Emitter Saturation Voltage	I <sub>C</sub> = -150mA, I <sub>B</sub> = -15mA I <sub>C</sub> = -500mA, I <sub>B</sub> = -50mA		-0.4 -1.6	V V
V <sub>BE</sub> (sat)	* Base-Emitter Saturation Voltage	I <sub>C</sub> = -150mA, I <sub>B</sub> = -15mA I <sub>C</sub> = -500mA, I <sub>B</sub> = -50mA		-1.3 -2.6	V V
f <sub>T</sub>	Current Gain Bandwidth Product	$I_{C}$ = -50mA, $V_{CE}$ = -20V, f=100MHz	200		MHz
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> = -10V, I <sub>E</sub> =0 f=1.0MHz		8	pF
t <sub>ON</sub>	Turn On Time	$V_{CC}$ = -30V, $I_{C}$ = -150mA 45 $I_{B4}$ = -15mA		45	ns
t <sub>OFF</sub>	Turn Off Time	$V_{CC}$ = -6V, $I_{C}$ = -150mA 100 $I_{B1}$ = $I_{B2}$ =15mA		ns	

\* Pulse Test: PW≤300μs, Duty Cycle≤2%



## **Typical Characteristics**

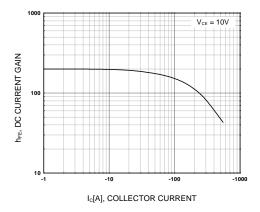


Figure 1. DC current Gain

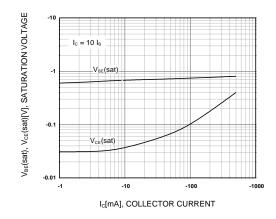


Figure 2. Collector-Emitter Saturation Voltage Base-Emitter Saturation Voltage

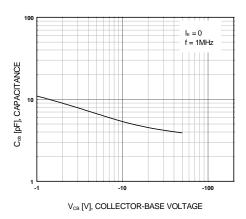


Figure 3. Output Capacitance

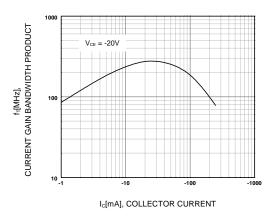
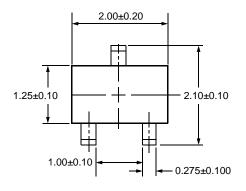
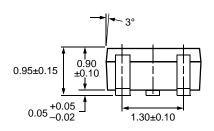


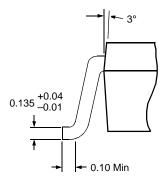
Figure 4. Current Gain Bandwidth Product

## **Package Dimensions**

# SOT-323







Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench <sup>®</sup>	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	$I^2C^{TM}$	$OCX^{TM}$	RapidConfigure™	UHC™
Across the board. Around the world.™		OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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