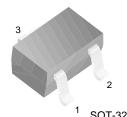


### **FJX1182**

### **Low Frequency Power Amplifier**



1. Base 2. Emitter 3. Collector

## **PNP Epitaxial Silicon Transistor**

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

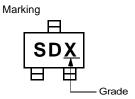
Symbol	Parameter	Ratings	Units
$V_{CBO}$	Collector-Base Voltage	-35	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-30	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current	-500	mA
P <sub>C</sub>	Collector Power Dissipation	150	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C

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

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> = -35, I <sub>E</sub> =0			-0.1	μΑ
I <sub>EBO</sub>	Emitter Cut-off Current	V <sub>EB</sub> = -5V, I <sub>C</sub> =0			-0.1	μΑ
h <sub>FE1</sub>	DC Current Gain	V <sub>CE</sub> = -1V, I <sub>C</sub> = -100mA	70		240	
h <sub>FE2</sub>		$V_{CE}$ = -6V, $I_{C}$ = -400mA	25			
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -100mA, I <sub>B</sub> = -10mA		-0.1	-0.25	V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	I <sub>C</sub> = -100mA, V <sub>CE</sub> = -1V		-0.8	-1.0	V
f <sub>T</sub>	Current Gain Bandwidth Product	I <sub>C</sub> = -20mA, V <sub>CE</sub> = -6V		200		MHz
C <sub>ob</sub>	Output Capacitance	$V_{CB}$ = -6V, $I_E$ = 0 f=1MHz		13		pF

## $h_{\mbox{\scriptsize FE}}$ Classification

Classification	0	Υ	
h <sub>FE1</sub>	70 ~ 140	120 ~ 240	



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## **Typical Characteristics**

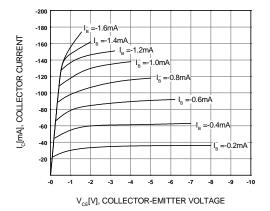


Figure 1. Static Characteristic

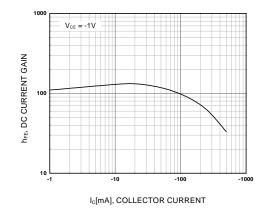


Figure 2. DC current Gain

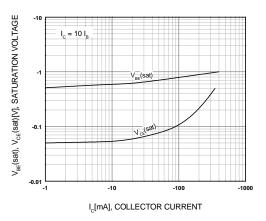


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

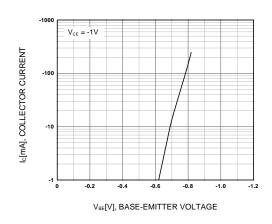


Figure 4. Base-Emitter On Voltage

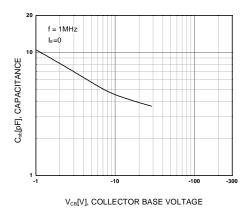
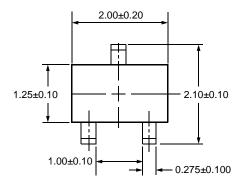


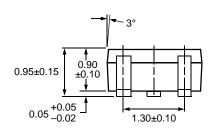
Figure 5. Collector Output Capacitance

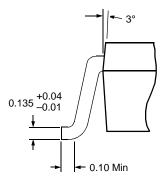
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## **Package Dimensions**

# SOT-323







Dimensions in Millimeters

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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 Franci	hise™	OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX <sup>TM</sup>
Programmable Ad	ctive Droop™	OPTOPLANAR™	SMART START™	

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