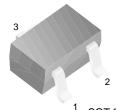


FJX945

Audio Frequency Amplifier High Frequency OSC.

- Collector-Base Voltage V_{CBO}=60V
 High Current Gain Bandwidth Product f_T=300MHz (Typ)
- Complement to FJX733



SOT-323 1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V _{CEO}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	150	mA
P _C	Collector Power Dissipation	200	mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 ~ 150	°C

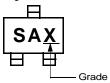
Electrical Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage	I _C =100μA, I _E =0	60			V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA, I _B =0	50			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E =10μA, I _C =0	5			V
I _{CBO}	Collector Cut-off Current	V_{CB} =40V, I_{E} =0			0.1	μΑ
I _{EBO}	Emitter Cut-off Current	V_{EB} =3V, I_{C} =0			0.1	μΑ
h _{FE}	DC Current Gain	V_{CE} =6V, I_{C} =1.0mA	70		700	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C =100mA, I _B =10mA		0.15	0.3	V
f _T	Current Gain Bandwidth Product	V _{CE} =6V, I _C =10mA		300		MHz
f _T C _{ob}	Output Capacitance	V _{CB} =6V, I _E =0 f=1MHz		2.5		pF
NF	Noise Figure	V_{CE} =6V, I_{E} = -0.5mA f=1KHz, R_{S} =500 Ω		4.0		dB

h_{FE} Classification

Classification	0	Y	G	L	
h _{FE}	70 ~ 140	120 ~ 240	200 ~ 400	350 ~ 700	





Typical Characteristics

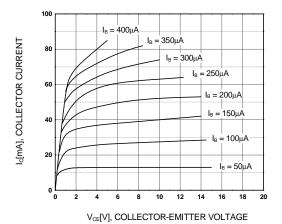


Figure 1. Static Characteristic

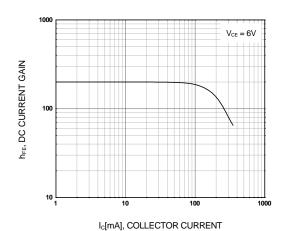


Figure 3. DC current Gain

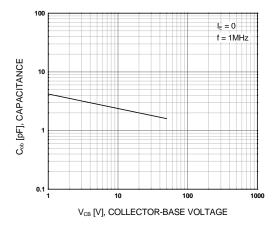


Figure 5. Collector Output Capacitance

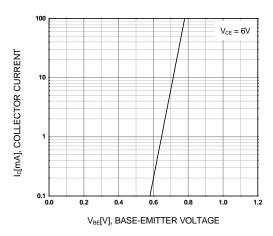


Figure 2. Transfer Characteristic

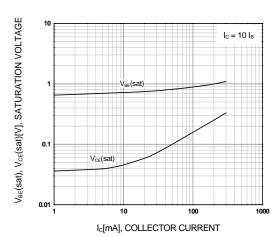


Figure 4. Collector-Emitter Saturation Voltage Base-Emitter Saturation Voltage

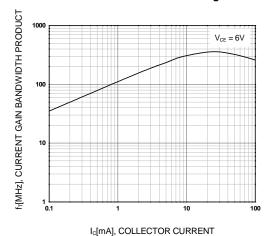
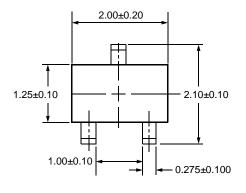


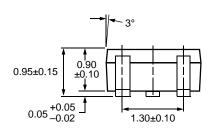
Figure 6. Current Gain Bandwidth Product

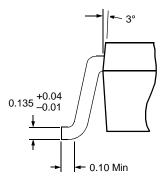
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Package Dimensions

SOT-323







Dimensions in Millimeters

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E ² CMOS ^T	М	HiSeC™	MSX™	QT Optoelectronics™	TinyLogic [®]
EnSigna™	И	I ² C TM	MSXPro™	Quiet Series™	TINYOPTO™
FACT™		i-Lo™	OCX^{TM}	RapidConfigure™	TruTranslation™
Across the board. Around the world.™		OCXPro™	RapidConnect™	UHC™	
The Power Franchise®		OPTOLOGIC [®]	SILENT SWITCHER®	UltraFET [®]	
Programmable Active Droop™		OPTOPLANAR™	SMART START™	VCX TM	

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