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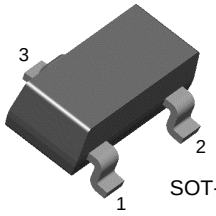
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FAIRCHILD
SEMICONDUCTOR®

KSA812

Low Frequency Amplifier

- Collector-Base Voltage : V_{CBO}= -60V
- Complement to KSC1623



SOT-23

1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	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	-100	mA
P_C	Collector Power Dissipation	150	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

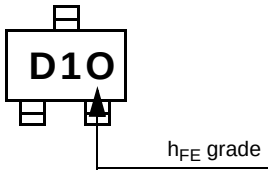
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CBO}	Collector Cut-off Current	V_{CB}= -60V, I_E=0			-0.1	μA
I_{EBO}	Emitter Cut-off Current	V_{EB}= -5V, I_C=0			-0.1	μA
h_{FE}	DC Current Gain	V_{CE}= -6V, I_C= -1mA	90	200	600	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C= -100mA, I_B= -10mA		-0.18	-0.3	V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE}= -6V, I_C= -1mA	-0.55	-0.62	-0.65	V
f_T	Current Gain Bandwidth Product	V_{CE}= -6V, I_C= -10mA		180		MHz
C_{ob}	Output Capacitance	V_{CB}= -10V, I_E=0, f=1MHz		4.5		pF

h_{FE} Classification

Classification	O	Y	G	L
h_{FE}	90 ~ 180	135 ~ 270	200 ~ 400	300 ~ 600

Marking



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Typical Characteristics

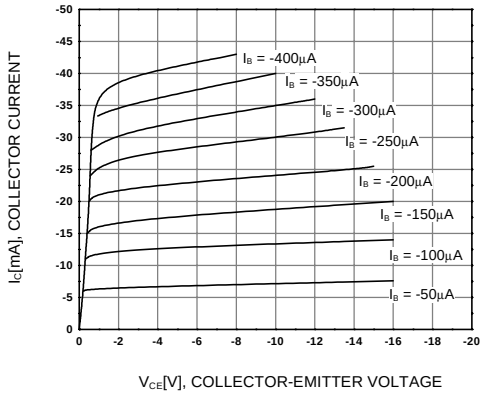


Figure 1. Static Characteristic

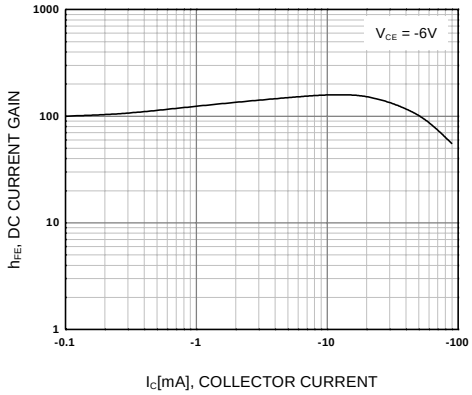


Figure 2. DC current Gain

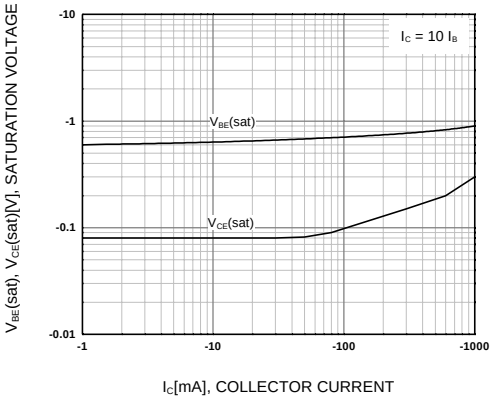


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

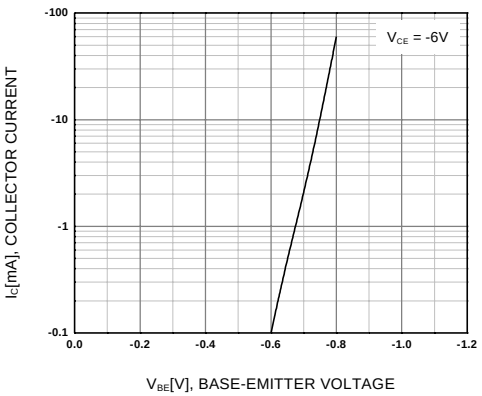


Figure 4. Base-Emitter On Voltage

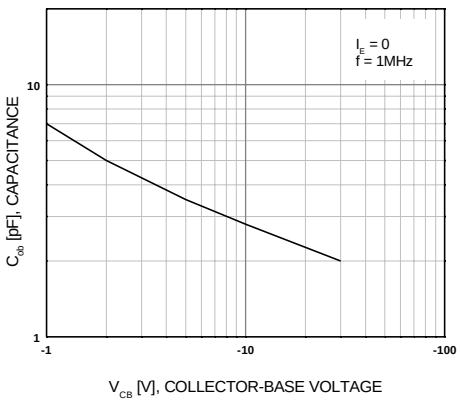


Figure 5. Collector Output Capacitance

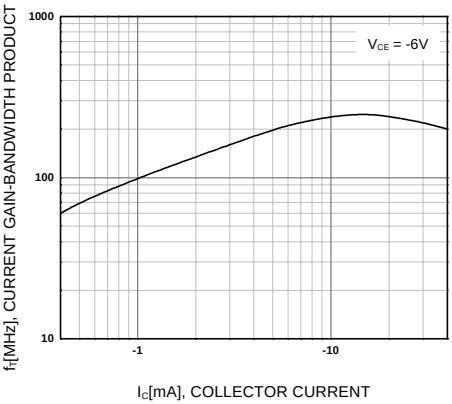


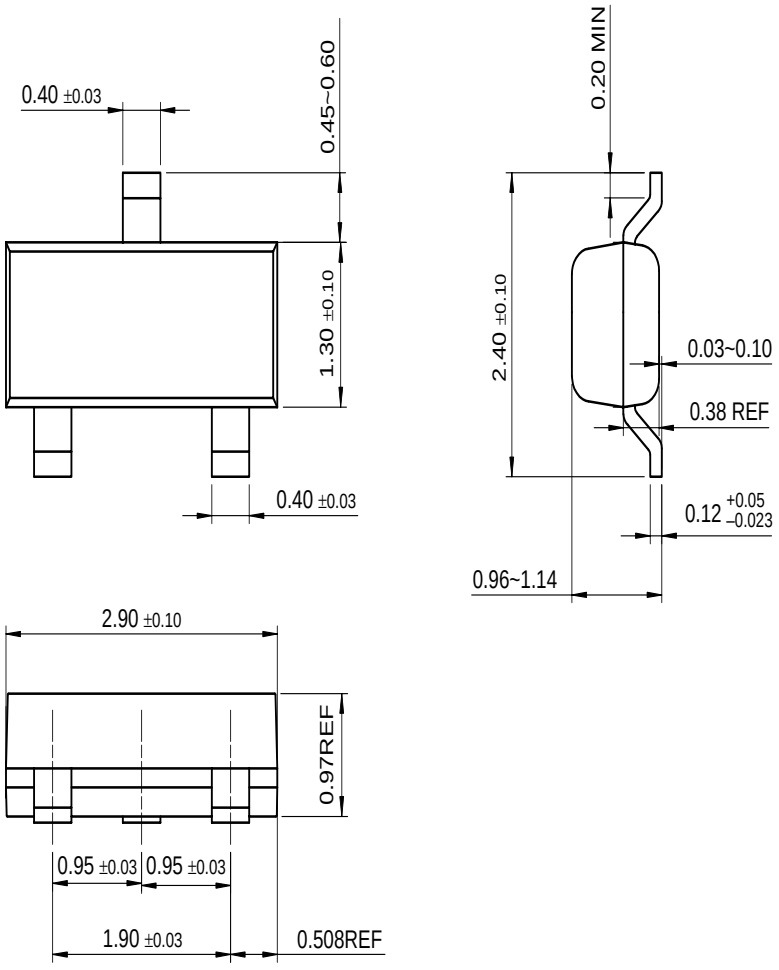
Figure 6. Current Gain Bandwidth Product

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Package Demensions

SOT-23



Dimensions in Millimeters

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