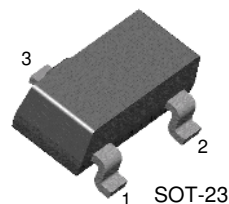


# KSA1182

KSA1182

## Low Frequency Power Amplifier

- Complement to KSC2859



1. Base 2. Emitter 3. Collector

## PNP Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Ratings	Units
$V_{CBO}$	Collector-Base Voltage	-35	V
$V_{CEO}$	Collector-Emitter Voltage	-30	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-500	mA
$P_C$	Collector Power Dissipation	150	mW
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

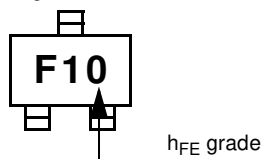
### Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = -35\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	$\mu\text{A}$
$h_{FE1}$ $h_{FE2}$	DC Current Gain	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$ $V_{CE} = -6\text{V}, I_C = -400\text{mA}$	70 25		240	
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C = -100\text{mA}, I_B = -10\text{mA}$		-0.1	-0.25	V
$V_{BE}(\text{on})$	Base-Emitter On Voltage	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$		-0.8	-1.0	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = -6\text{V}, I_C = -20\text{mA}$		200		MHz
$C_{ob}$	Output Capacitance	$V_{CB} = -6\text{V}, I_E = 0, f = 1\text{MHz}$		13		pF

### $h_{FE}$ Classification

Classification	O	Y
$h_{FE1}$	70 ~ 140	120 ~ 240

Marking



# Typical Characteristics

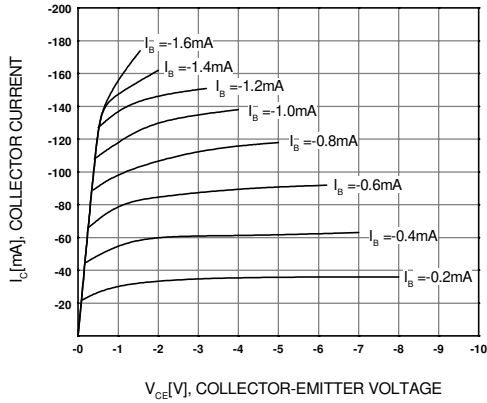


Figure 1. Static Characteristic

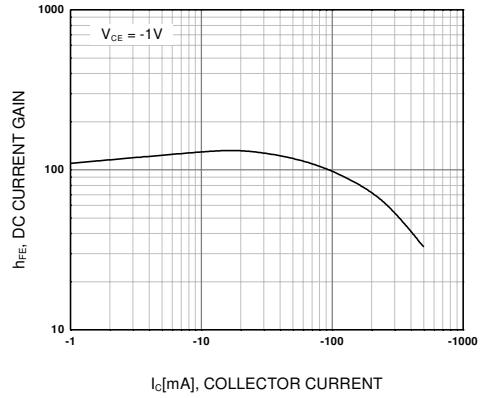


Figure 2. DC current Gain

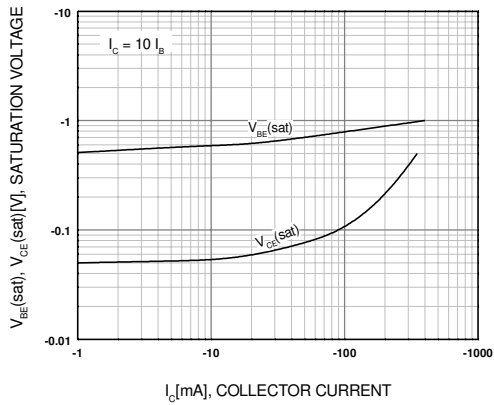


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

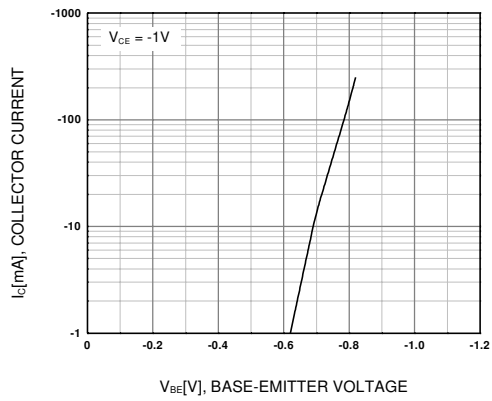


Figure 4. Base-Emitter On Voltage

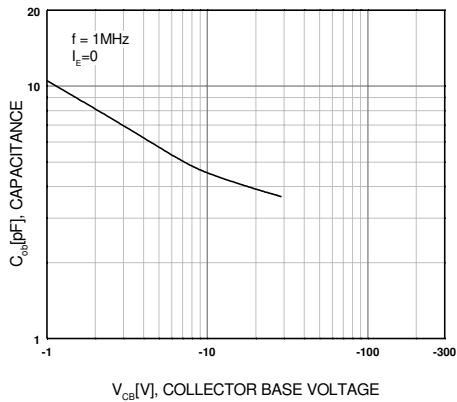
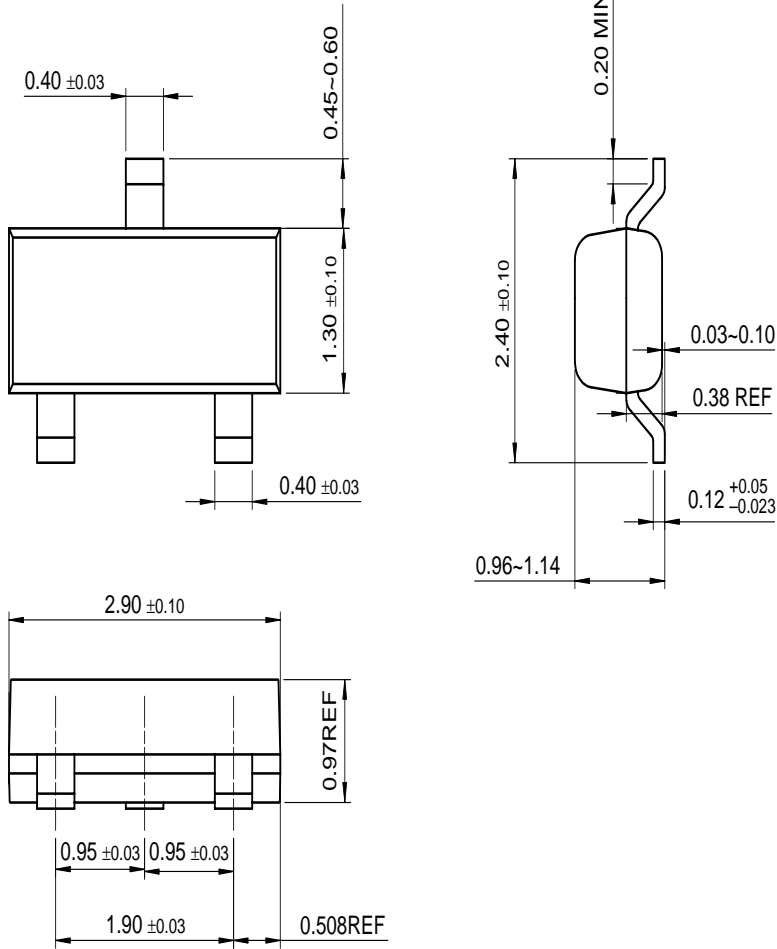


Figure 5. Collector Output Capacitance

# Package Dimensions

## SOT-23



Dimensions in Millimeters

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ActiveArray <sup>TM</sup>	FACT Quiet series <sup>TM</sup>	ISOPLANAR <sup>TM</sup>	POP <sup>TM</sup>	Stealth <sup>TM</sup>
Bottomless <sup>TM</sup>	FAST <sup>®</sup>	LittleFET <sup>TM</sup>	Power247 <sup>TM</sup>	SuperSOT <sup>TM</sup> -3
CoolFET <sup>TM</sup>	FAST <sup>r</sup> <sup>TM</sup>	MicroFET <sup>TM</sup>	PowerTrench <sup>®</sup>	SuperSOT <sup>TM</sup> -6
CROSSVOL <sup>TM</sup>	FRFET <sup>TM</sup>	MicroPak <sup>TM</sup>	QFET <sup>TM</sup>	SuperSOT <sup>TM</sup> -8
DOME <sup>TM</sup>	GlobalOptoisolator <sup>TM</sup>	MICROWIRE <sup>TM</sup>	QS <sup>TM</sup>	SyncFET <sup>TM</sup>
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