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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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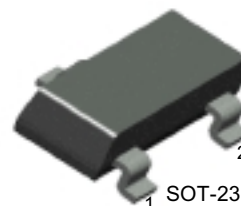


KSC2859

KSC2859

Low Frequency Power Amplifier

- Complement to KSA1182



SOT-23
1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	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 Dissipation	150	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

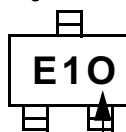
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CEO}	Collector Cut-off Current	$V_{CB}=35\text{V}, I_E=0$			0.1	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=5\text{V}, I_C=0$			0.1	μA
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	$V_{CE}=6\text{V}, I_C=20\text{mA}$		300		MHz
C_{ob}	Output Capacitance	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$		7		pF

h_{FE1} Classification

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

Marking



h_{FE} grade

Typical Characteristics

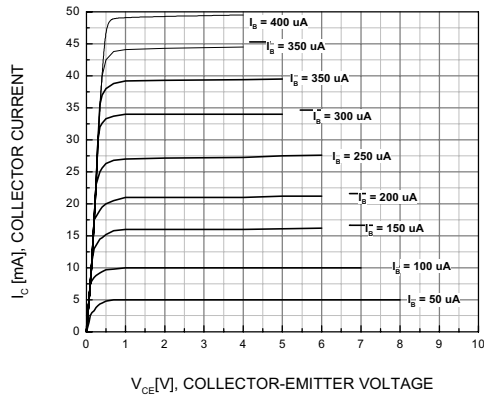


Figure 1. Static Characteristics

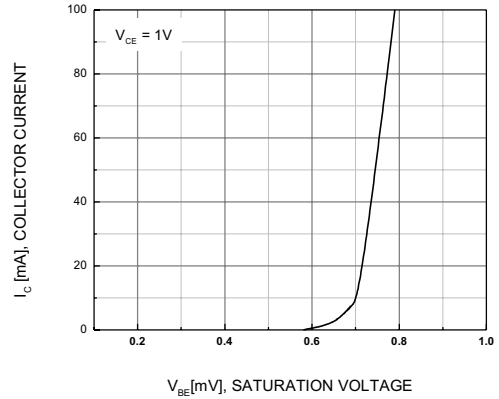


Figure 2. Base-Emitter On Voltage

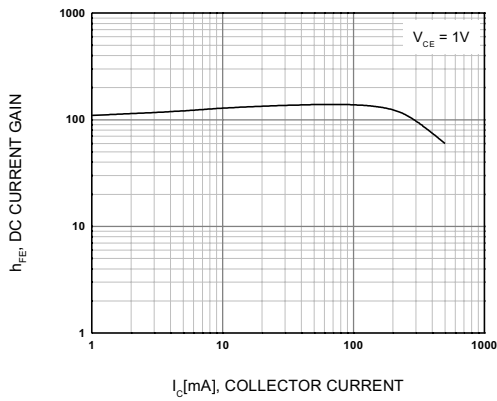


Figure 3. DC Current Gain

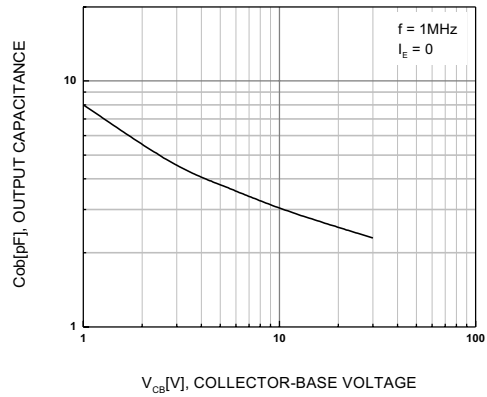


Figure 4. Output Capacitance

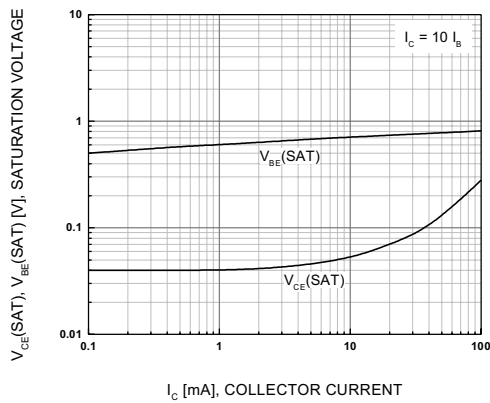
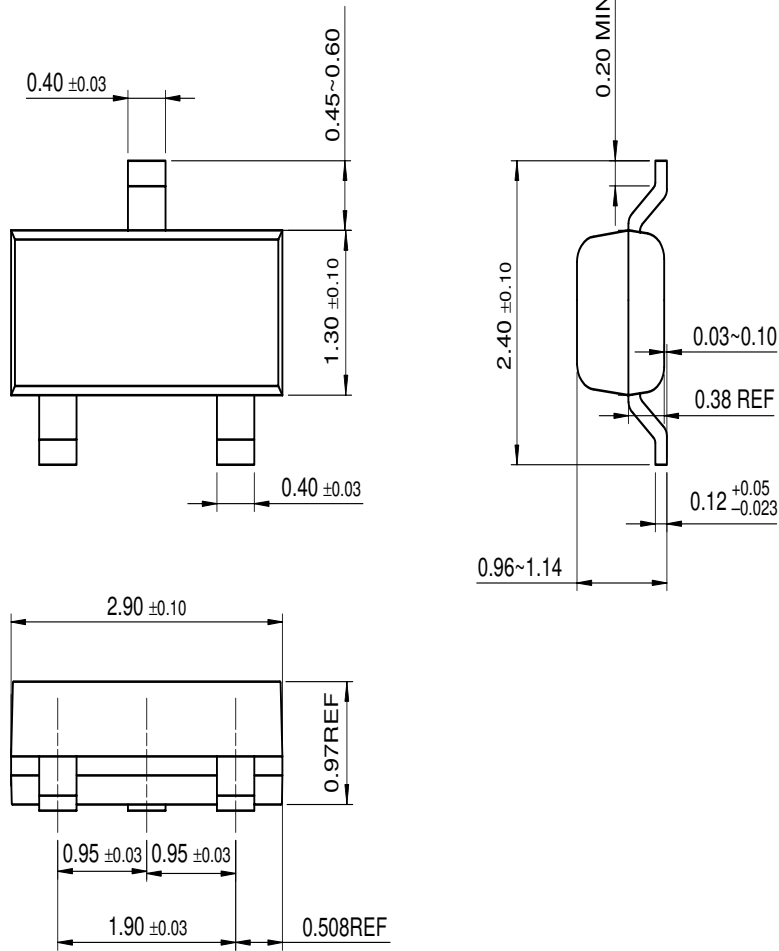


Figure 5. Saturation Voltage

Package Dimensions

SOT-23



Dimensions in Millimeters

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