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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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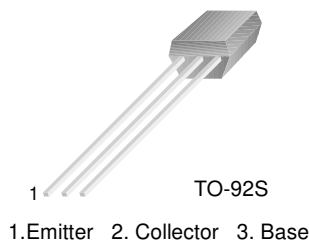
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KSC2784

Audio Frequency Low Noise Amplifier

- Complement to KSA1174



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	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	50	mA
I_B	Base Current	10	mA
P_C	Collector Power Dissipation	300	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	$V_{CB}=120\text{V}, I_E=0$			50	nA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=5\text{V}, I_C=0$			50	nA
h_{FE1} h_{FE2}	DC Current Gain	$V_{CE}=6\text{V}, I_C=0.1\text{mA}$ $V_{CE}=6\text{V}, I_C=1\text{mA}$	150 200	580 600	1200	
$V_{BE}(\text{on})$	Base Emitter On Voltage	$V_{CE}=6\text{V}, I_C=1\text{mA}$	0.55	0.59	0.65	V
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C=10\text{mA}, I_B=1\text{mA}$		0.07	0.3	V
f_T	Current Gain Bandwidth Product	$V_{CE}=6\text{V}, I_C=1\text{mA}$	50	110		MHz
C_{ob}	Output Capacitance	$V_{CB}=30\text{V}, I_E=0, f=1\text{MHz}$		1.6	2.5	pF
NL	Noise Level			25	40	mV

h_{FE2} Classification

Classification	P	F	E	U
h_{FE2}	200 ~ 400	300 ~ 600	400 ~ 800	600 ~ 1200

Typical Characteristics

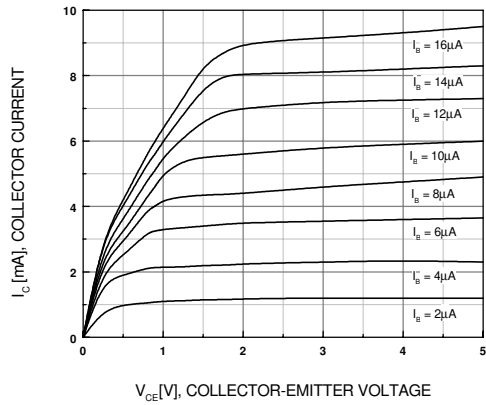


Figure 1. Static Characteristics

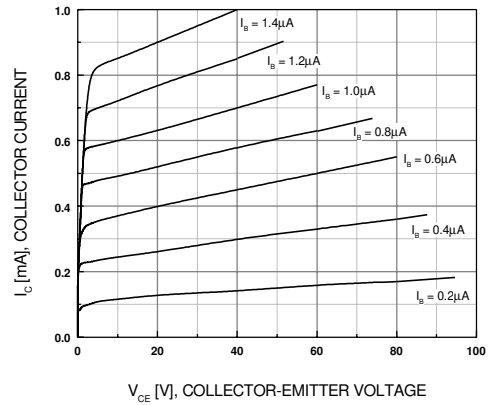


Figure 2. Static Characteristics

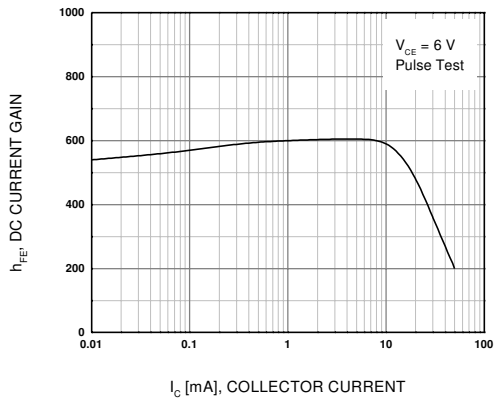


Figure 3. DC Current Gain

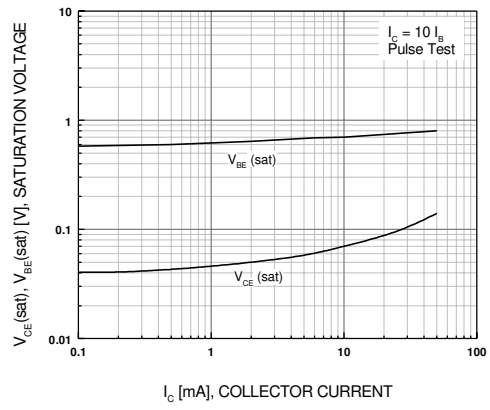


Figure 4. Saturation Voltage

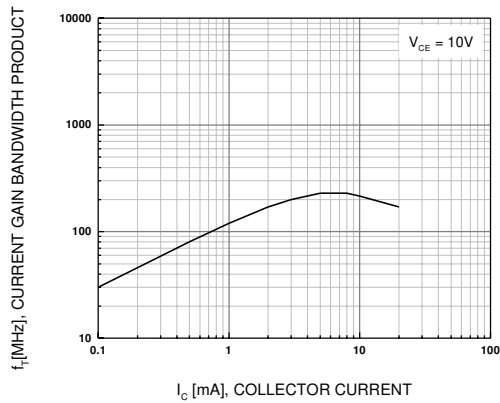


Figure 5. $f_T - I_C$

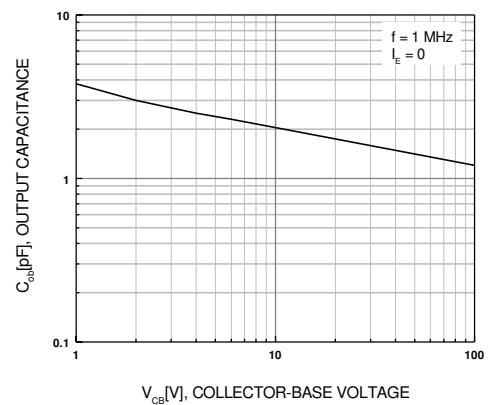
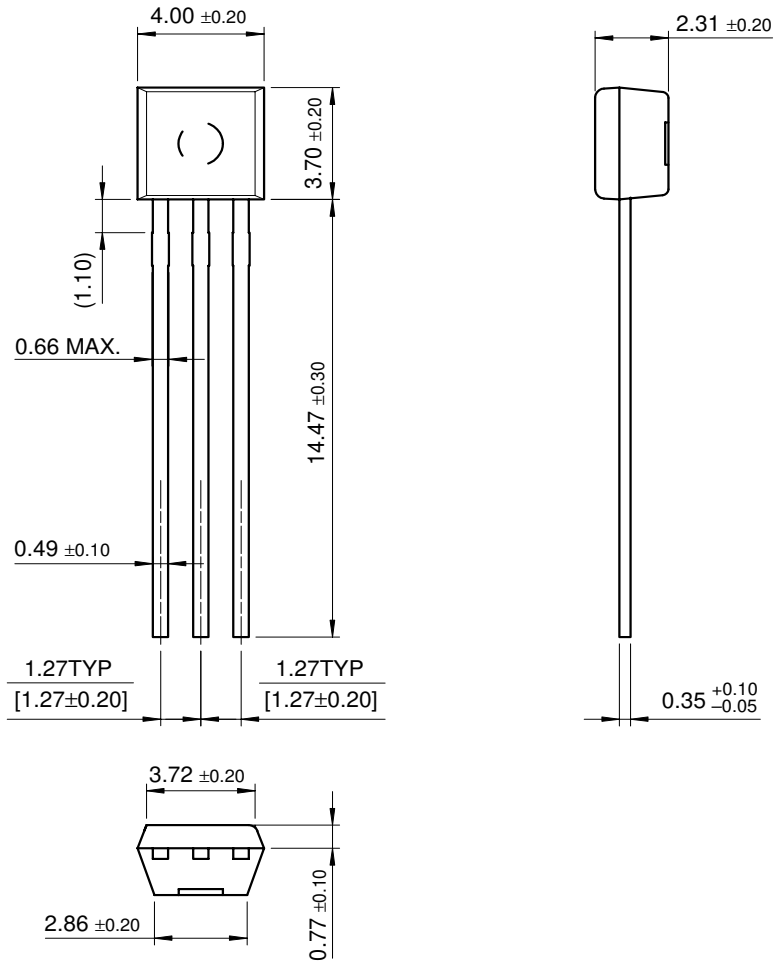


Figure 6. Output Capacitance

Package Dimensions

TO-92S



Dimensions in Millimeters

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