Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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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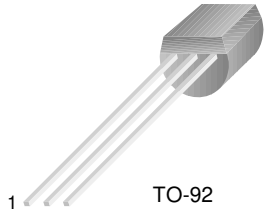
FAIRCHILD
SEMICONDUCTOR®

KSA642

Low Frequency Power Amplifier

- Complement to KSD227
- Collector Power Dissipation : P_C = 400mW
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)



TO-92

1. Emitter 2. Base 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	-30	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current (DC)	-300	mA
I_{CP}	* Collector Current (Pulse)	-500	mA
P_C	Collector Power Dissipation	400	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

* PW≤10ms, Duty cycle≤50%

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C= -100μA, I_E=0	-30			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= -10mA. I_B=0	-25			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = -10μA. I_C=0	- 5			V
I_{CBO}	Collector Cut-off Current	V_{CB}= -25V, I_E=0			-100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB}= -3V, I_C=0			-100	nA
h_{FE}	* DC Current Gain	V_{CE}= -1V, I_C= -50mA	70		400	
V_{CE} (sat)	* Collector-Emitter Saturation Voltage	I_C= -300mA, I_B= -30mA		-0.35	-0.6	V

* Pulse Test: PW≤350μs, Duty cycle≤2%

h_{FE} Classification

Classification	O	Y	G
h_{FE}	70 ~ 140	120 ~ 240	200 ~ 400

Typical Characteristics

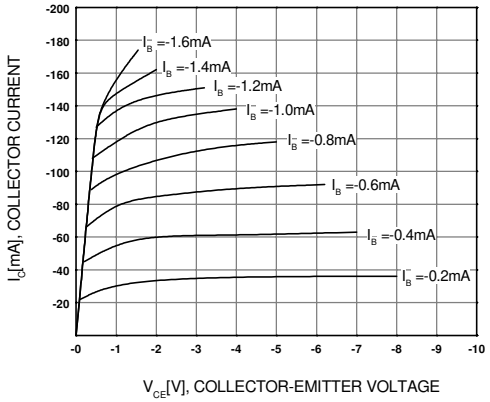


Figure 1. Static Characteristic

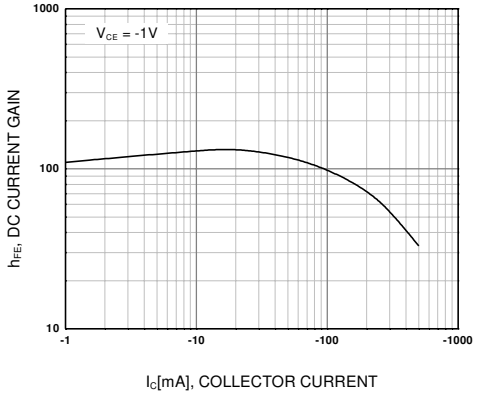


Figure 2. DC current Gain

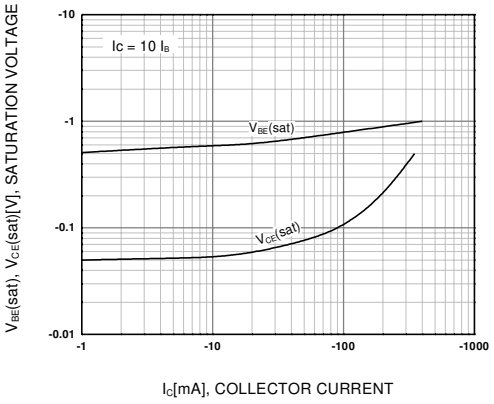


Figure 3. Base-Emitter Saturation Voltag Collector-Emitter Saturation Voltage

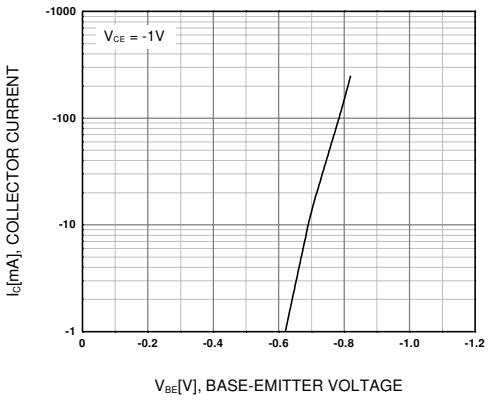


Figure 4. Base-Emitter On Voltage

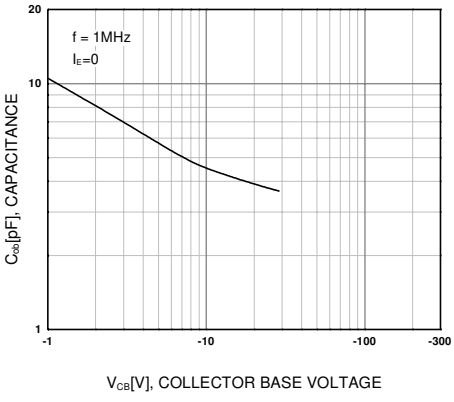
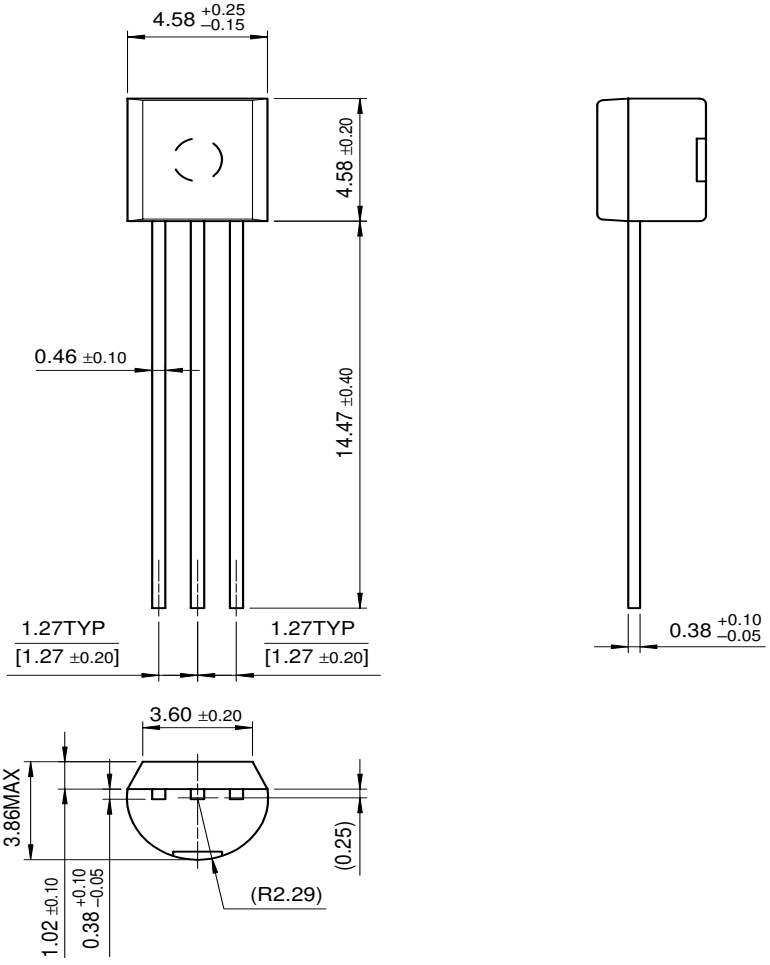


Figure 5. Collector Output Capacitance

Package Demensions

TO-92



Dimensions in Millimeters

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