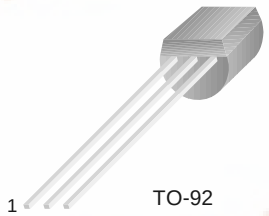
FAIRCHILD SEMICONDUCTOR®

KSA539

Low Frequency Amplifier

- Complement to KSC815
- Collector-Base Voltage: V_{CBO} = -60V
- 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	-60	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-200	mA
P_C	Collector Power Dissipation	400	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
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = -100μA, I_E =0	-60			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= -10mA, I_B=0	-45			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= -10μA, I_C=0	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB}= -45V, 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	40		240	
V_{BE}(on)	Base-Emitter On Voltage	V_{CE}= -1V, I_C= -10mA	-0.60	-0.65	-0.90	V
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C= -150mA, I_B= -15mA		-0.25	-0.5	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C= -150mA, I_B= -15mA		-0.9	-1.2	V

h_{FE} Classification

Classification	R	O	Y
h_{FE}	40 ~ 80	70 ~ 140	120 ~ 240

Typical Characteristics

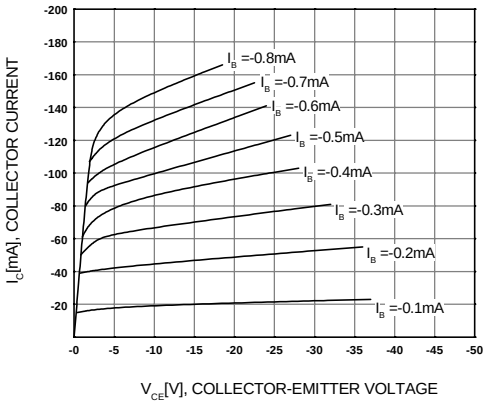


Figure 1. Static Characteristic

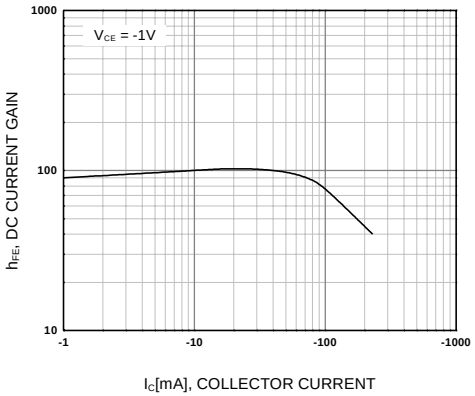


Figure 2. DC current Gain

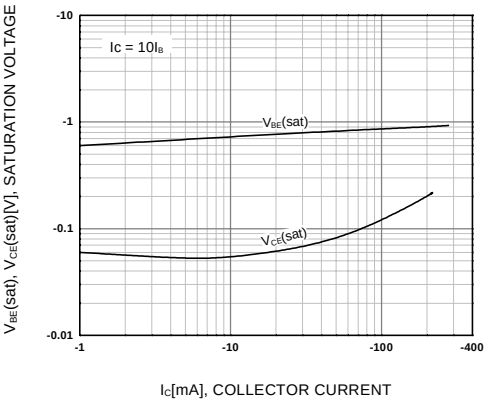


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

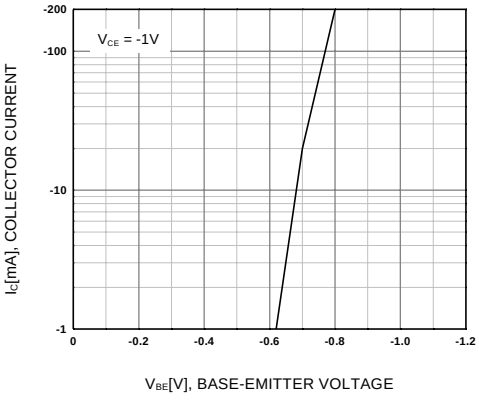


Figure 4. Base-Emitter On Voltage

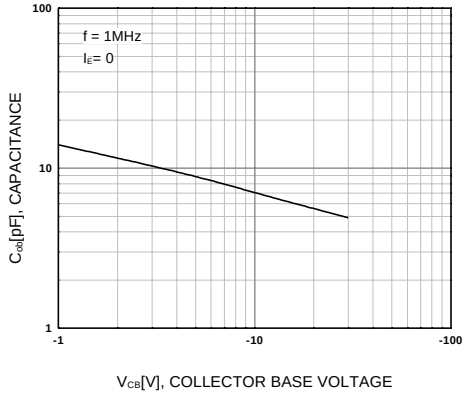
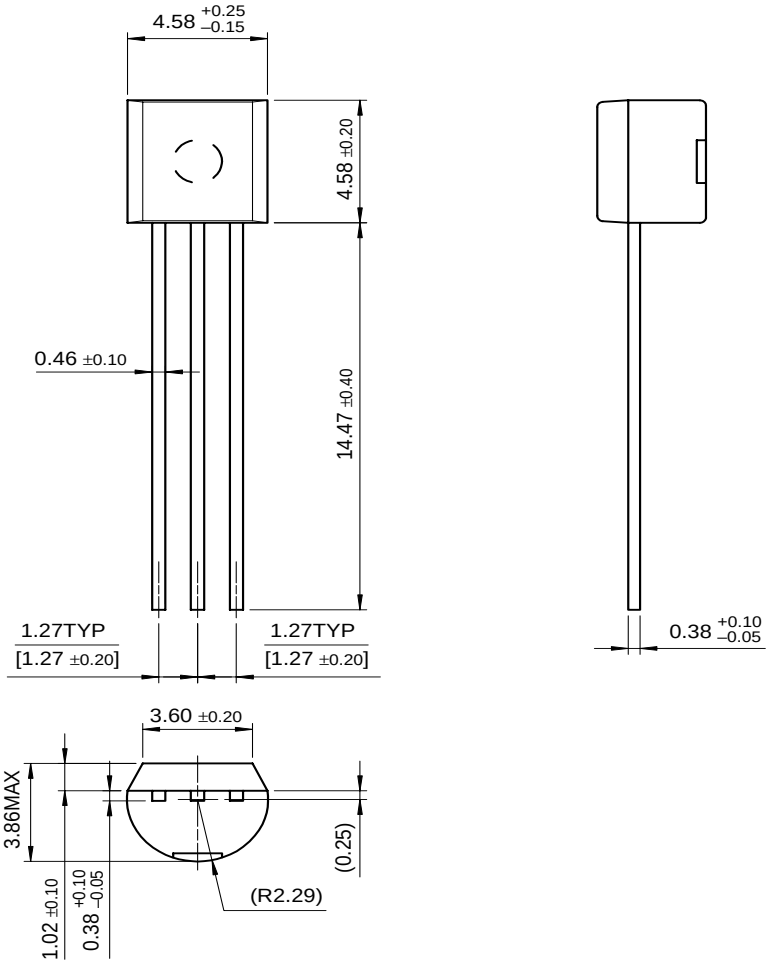


Figure 5. Collector Output Capacitance

Package Demensions

TO-92



Dimensions in Millimeters

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E^2CMOS™	LittleFET™	QT Optoelectronics™	TinyLogic™
EnSigna™	MicroFET™	Quiet Series™	UHC™
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