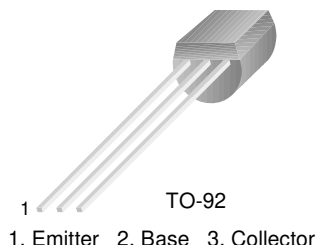


**Low Frequency Amplifier**

- 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)



**PNP Epitaxial Silicon Transistor**

**Absolute Maximum Ratings**  $T_a=25^{\circ}C$  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	$^{\circ}C$
$T_{STG}$	Storage Temperature	-55 ~ 150	$^{\circ}C$

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

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = -100\mu A, I_E = 0$	-60			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10mA, I_B = 0$	-45			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = -10\mu A, I_C = 0$	-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

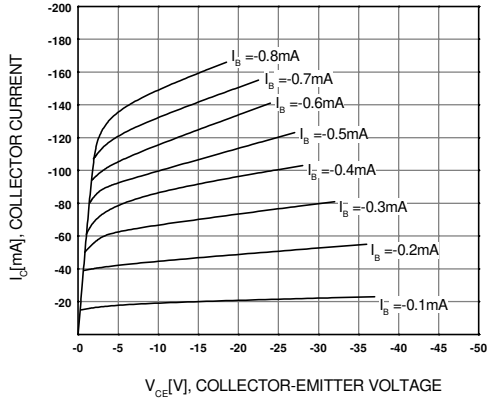


Figure 1. Static Characteristic

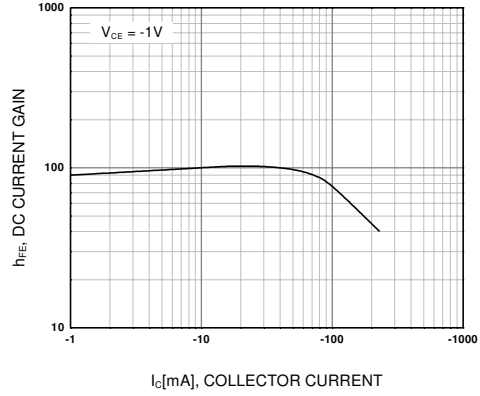


Figure 2. DC current Gain

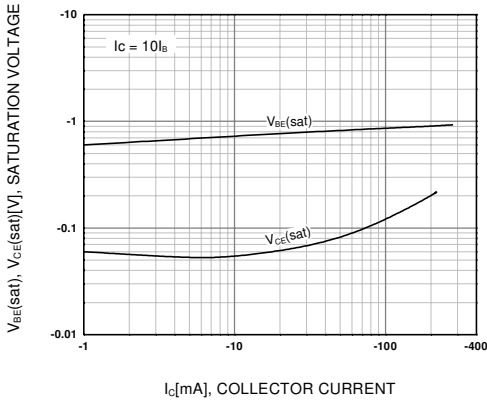


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

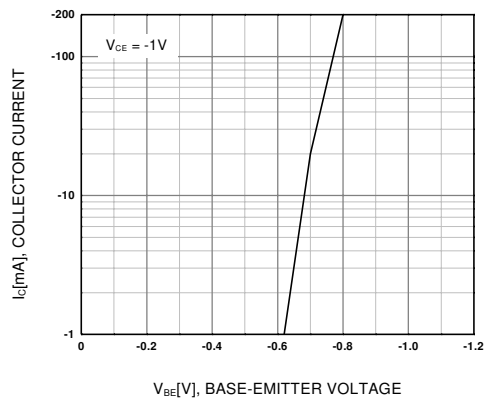


Figure 4. Base-Emitter On Voltage

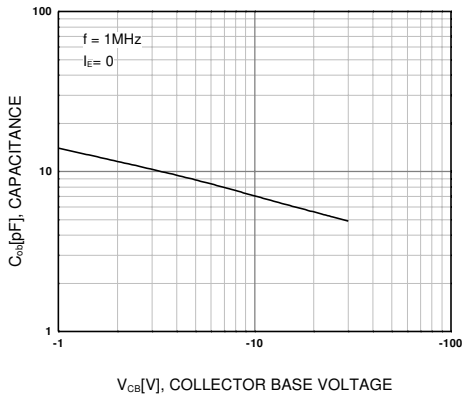
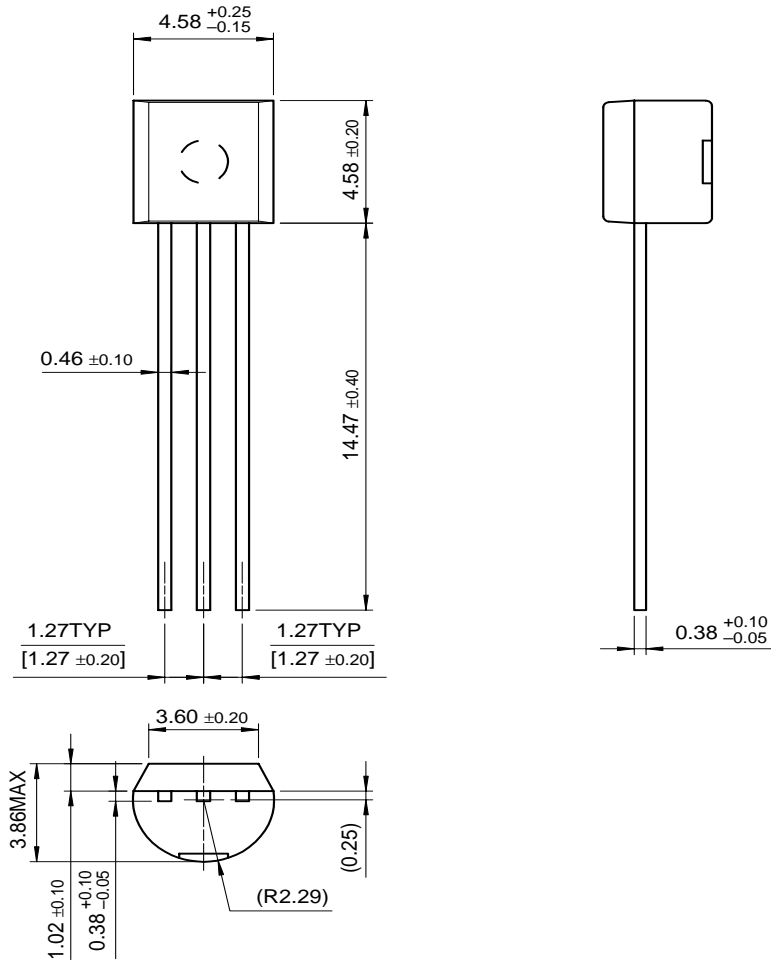


Figure 5. Collector Output Capacitance

# Package Dimensions

## TO-92



Dimensions in Millimeters

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KSA539  
PNP Epitaxial Silicon Transistor

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Features

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KSA539CYTA	Full Production	\$0.058	<a href="#">TO-92</a>	3	TAPE REEL
KSA539OTA	Full Production	\$0.058	<a href="#">TO-92</a>	3	TAPE REEL
KSA539YBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
KSA539CYBU	Full Production	\$0.05	<a href="#">TO-92</a>	3	BULK

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