

KSA733

Low Frequency Amplifier

- Collector-Base Voltage : V_{CBO}= -60V
- Complement to KSC945
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)



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	-50	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-150	mA
P _C	Collector Power Dissipation	250	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.	Тур.	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	-50			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} =60V, I _E =0			-100	nA
I _{EBO}	Emitter Cut-off Current	V _{EB} = -5V, I _C =0			-100	nA
h _{FE}	DC Current Gain	V_{CE} = -6V, I_{C} = -1mA	40		700	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C = -100mA, I _B = -10mA		-0.18	-0.3	V
V _{BE} (on)	Base-Emitter On Voltage	V_{CE} = -6V, I_{C} = -1mA	-0.50	-0.62	-0.80	V
f _T	Current Gain Bandwidth Product	V_{CE} = -6V, I_{C} = -10mA	50	180		MHz
C _{ob}	Output Capacitance	$V_{CB} = -10V, I_{E} = 0, f = 1MHz$		2.8		pF
NF	Noise Figure	V_{CE} = -6V, I_{C} = -0.3mA f=1MHz, Rs=10k Ω		6.0	20	dB

\mathbf{h}_{FE} Classification

Classification	R	0	Y	G	L
h _{FE}	40 ~ 80	70 ~ 140	120 ~ 240	200 ~ 400	350 ~ 700

Typical Characteristics

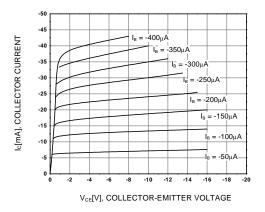


Figure 1. Static Characteristic

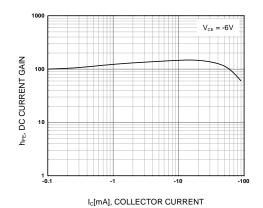


Figure 2. DC current Gain

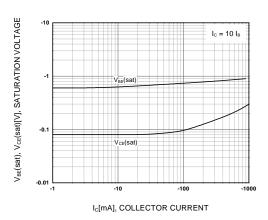


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

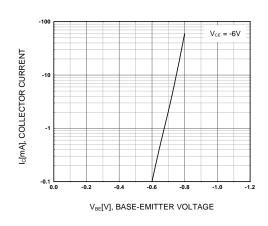


Figure 4. Base-Emitter On Voltage

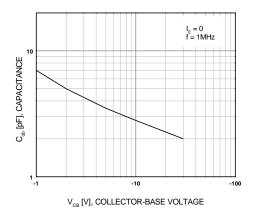


Figure 5. Collector Output Capacitance

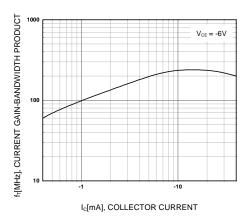
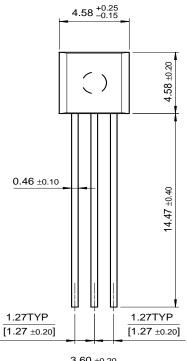


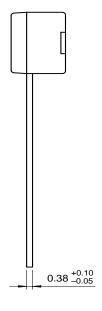
Figure 6. Current Gain Bandwidth Product

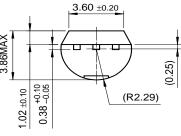
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Package Dimensions

TO-92







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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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