

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)



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.	Тур.	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	0	Y
h _{FE}	40 ~ 80	70 ~ 140	120 ~ 240

Typical Characteristics

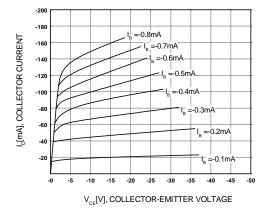


Figure 1. Static Characteristic

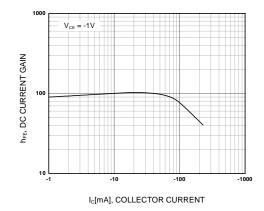


Figure 2. DC current Gain

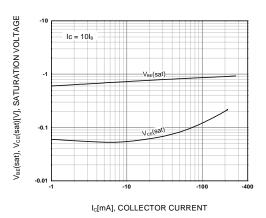


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

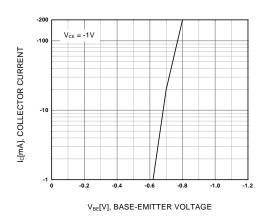


Figure 4. Base-Emitter On Voltage

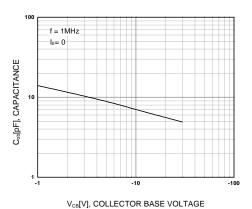
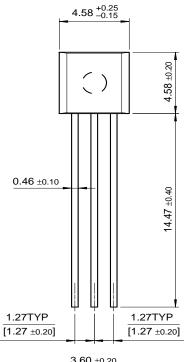


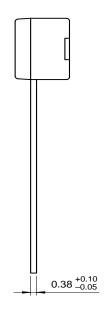
Figure 5. Collector Output Capacitance

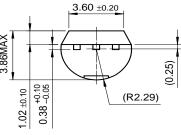
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Package Demensions

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