

KSA708

Low Frequency Amplifier & Medium Speed Switching

- Complement to KSC1008
- Collector-Base Voltage: V_{CBO}= -80V
 Collector Power Dissipation: P_C=800mW
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)



1. Emitter 2. Base 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings Ta=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V _{CBO}	Collector-Base Voltage	-80	V
V _{CEO}	Collector-Emitter Voltage	-60	V
V _{EBO}	Emitter-Base Voltage	-8	V
I _C	Collector Current	-700	mA
P _C	Collector Power Dissipation	800	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	$I_C = -100 \mu A, I_E = 0$	-80			V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA, I _B =0	-60			V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_E = -100 \mu A, I_C = 0$	-8			V
I _{CBO}	Collector Cut-off Current	$V_{CB} = -60V, I_{E} = 0$			-0.1	μΑ
I _{EBO}	Emitter Cut-off Current	V_{EB} = -5V, I_{C} =0			-0.1	μΑ
h _{FE}	* DC Current Gain	V_{CE} = -2V, I_{C} = -50mA	40		240	
V _{CE} (sat)	* Collector-Emitter Saturation Voltage	I_{C} = -500mA, I_{B} = -50mA		-0.3	-0.7	V
V _{BE} (sat)	* Base-Emitter Saturation Voltage	I_{C} = -500mA, I_{B} = -50mA		-0.9	1.1	V
f _T	Current Gain Bandwidth Product	V_{CE} = -10V, I_{C} = -50mA		50		MHz
C _{ob}	Output Capacitance	V _{CB} = -10V, I _E =0, f=1MHz		13		pF

^{*} Pulse Test: PW≤350µs, Duty cycle≤2%

h_{FE} Classification

Classification	R	0	Υ
h _{FE}	40 ~ 80	70 ~ 140	120 ~ 240

Typical Characteristics

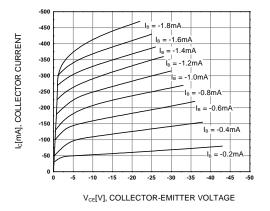


Figure 1. Static Characteristic

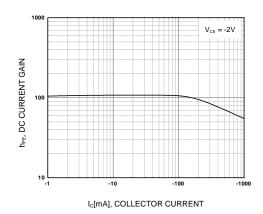


Figure 2. DC current Gain

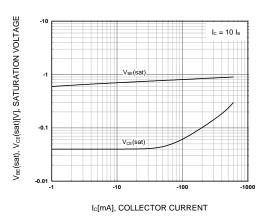


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

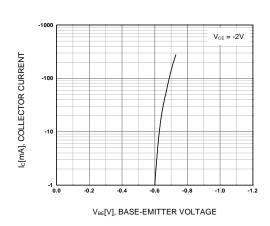


Figure 4. Base-Emitter On Voltage

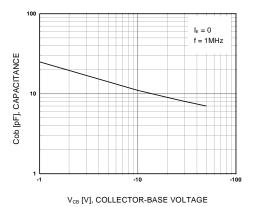
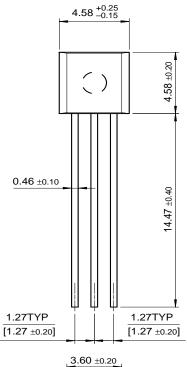


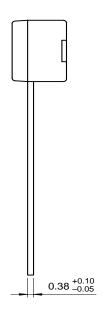
Figure 5. Collector Output Capacitance

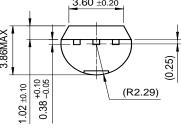
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Package Demensions

TO-92







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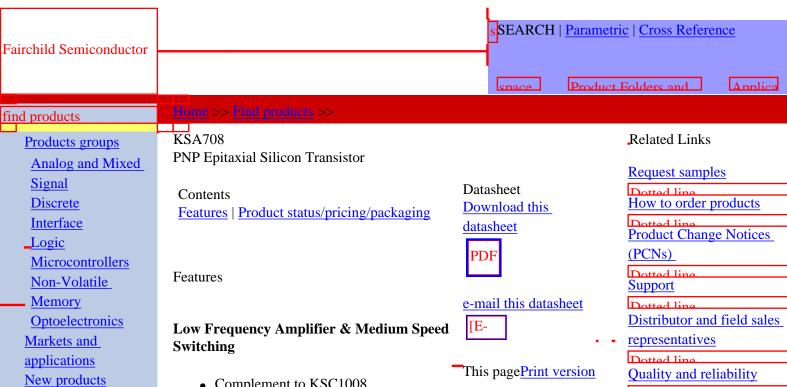
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• Collector Dissipation : P_C = 800mW

• Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)

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Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
KSA708YTA	Full Production	\$0.058	<u>TO-92</u>	3	TAPE REEL
KSA708CYBU	Full Production	\$0.058	<u>TO-92</u>	3	BULK
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