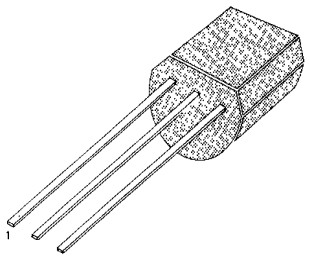
KSA709 PNP EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE AMPLIFIER

- Collector-Base Voltage: V_{CBO}= -160V
- Collector Dissipation: P_C=800mW
- Complement to KSC1009

TO-92



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-160	V
Collector-Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-8	V
Collector Current	I_C	-700	mA
Collector Dissipation	P_C	800	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C= -100μA, I_E=0	-160			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C= -10mA, I_B=0	-150			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E= -100μA, I_C=0	-8			V
Collector Cut-off Current	I_{CBO}	V_{CB}= -100V, I_E=0			-0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}= -5V, I_C=0			-0.1	μA
DC Current Gain	h_{FE}	V_{CE}= -2V, I_C= -50mA*	40		400	
Collector-Emitter Saturation Voltage	V_{CE} (sat)	IC= -200mA, IB= -20mA*		-0.3	-0.4	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	IC= -200mA, IC= -20mA*		-0.9	-1.0	V
Current-Gain-Bandwidth Product	f_T	V_{CE}= -10V, I_C= -50mA		50		MHz
Output Capacitance	C_{OB}	V_{CB}= -10V, I_E=0 f=1MHz			10	pF

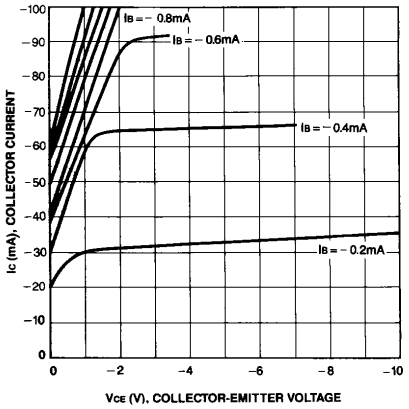
*Pulse Test: PW≤350μs, Duty cycle≤2%

h_{FE} CLASSIFICATION

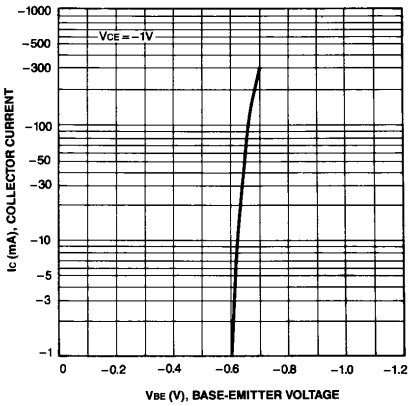
Classification	R	O	Y	G
h_{FE}	40-80	70-140	120-240	200-400

FAIRCHILD SEMICONDUCTOR TM

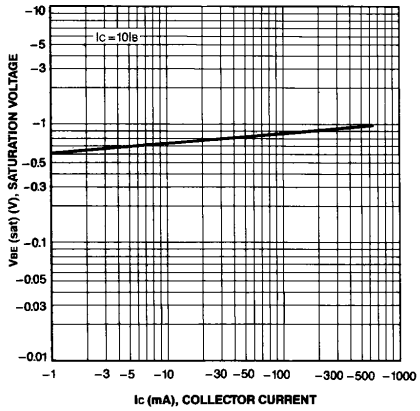
STATIC CHARACTERISTIC



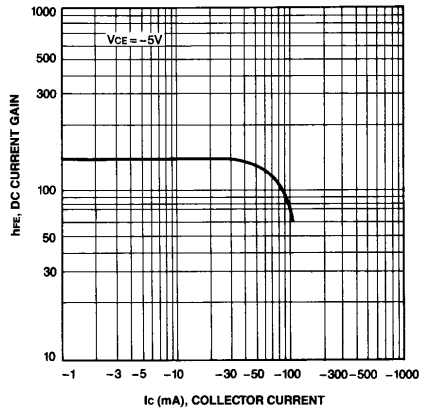
BASE-EMITTER ON VOLTAGE



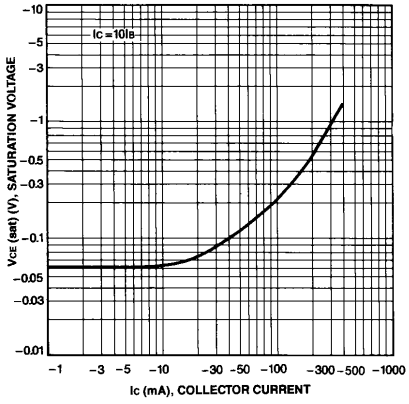
BASE-EMITTER SATURATION VOLTAGE



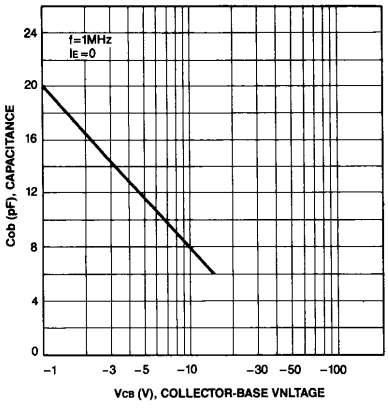
DC CURRENT GAIN



COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



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