

**KSA812**

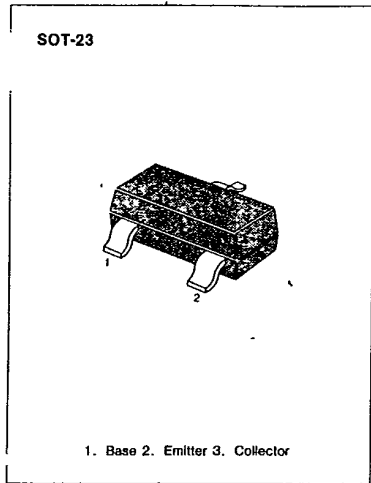
**PNP EPITAXIAL SILICON TRANSISTOR**

**LOW FREQUENCY AMPLIFIER**

- Complement to KSC1623
- Collector-Base Voltage  $V_{CB0} = -60V$

**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ C$ )**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-60	V
Collector-Emitter Voltage	$V_{CE0}$	-50	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_c$	-100	mA
Collector Dissipation	$P_c$	150	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 ~ 150	$^\circ C$



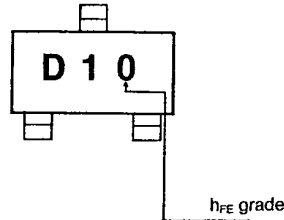
**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )**

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CB0}$	$V_{CB} = -60V, I_E = 0$			-0.1	$\mu A$
Emitter Cutoff Current	$I_{EB0}$	$V_{EB} = -5V, I_C = 0$			-0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = -6V, I_C = -1mA$	90	200	600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$		-0.18	-0.3	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C = -1mA, V_{CE} = -6V$	-0.55	-0.62	-0.65	V
Current Gain-Bandwidth Product	$f_T$	$I_C = -10mA, V_{CE} = -6V$		180		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0$ $f = 1MHz$		4.5		pF

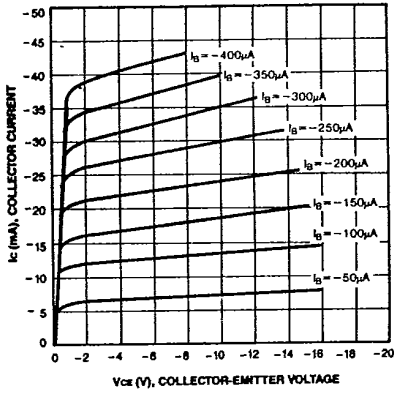
**$h_{FE}$  CLASSIFICATION**

Classification	O	Y	G	L
$h_{FE}$	90-180	135-270	200-400	300-600

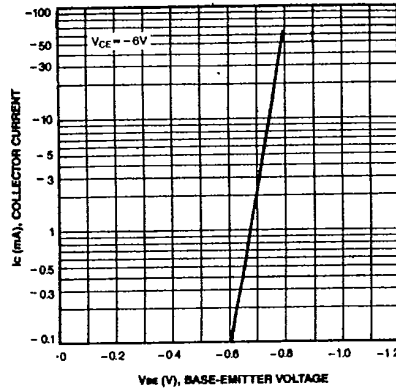
**Marking**



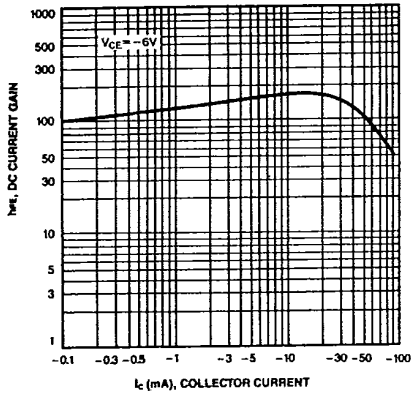
STATIC CHARACTERISTIC



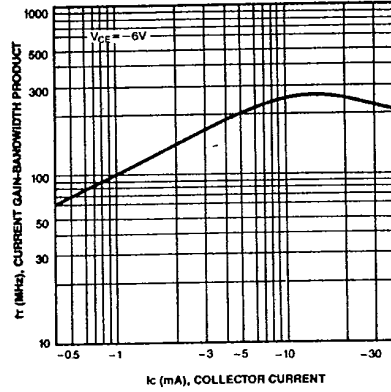
BASE-EMITTER ON VOLTAGE



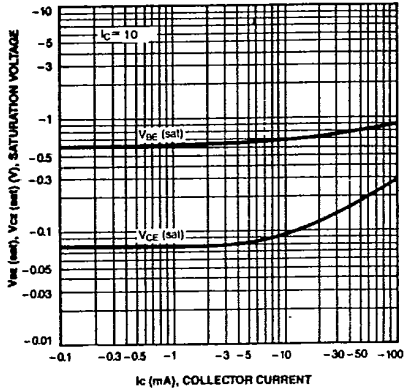
DC CURRENT GAIN



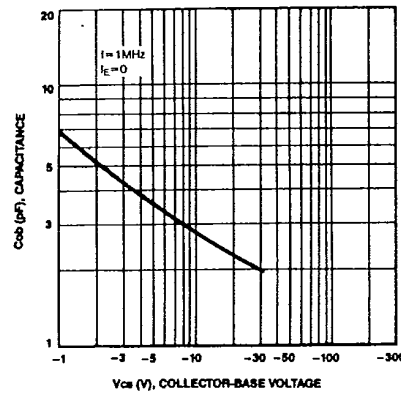
CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



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