

**KSC2859**

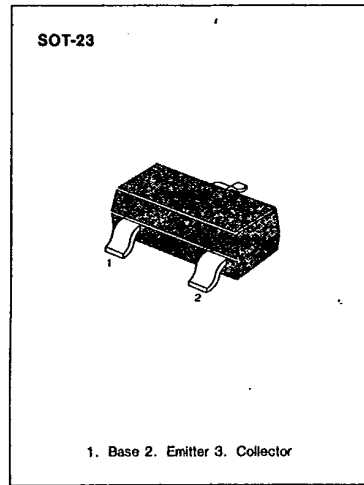
**NPN EPITAXIAL SILICON TRANSISTOR**

**LOW FREQUENCY POWER AMPLIFIER**

• Complement to KSA1182

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub> = 25°C)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	35	V
Collector-Emitter Voltage	V <sub>CE0</sub>	30	V
Emitter-Base Voltage	V <sub>EB0</sub>	5	V
Collector Current	I <sub>C</sub>	500	mA
Collector Dissipation	P <sub>C</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ 150	°C



**3**

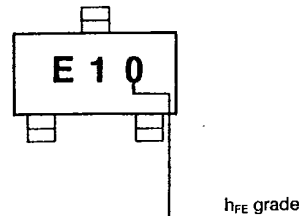
**ELECTRICAL CHARACTERISTICS (T<sub>a</sub> = 25°C)**

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =35V, I <sub>E</sub> =0			0.1	μA
Emitter Cutoff Current	I <sub>EB0</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			0.1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =100mA	70		240	
		V <sub>CE</sub> =6V, I <sub>C</sub> =400mA	25			
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =10mA		0.1	0.25	V
Base-Emitter On Voltage	V <sub>BE(on)</sub>	I <sub>C</sub> =100mA, V <sub>CE</sub> =1V		.08	1.0	V
Current Gain-Bandwidth Product	f <sub>T</sub>	I <sub>C</sub> =20mA, V <sub>CE</sub> =6V		300		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =6V, I <sub>E</sub> =0 f=1MHz		7		pF

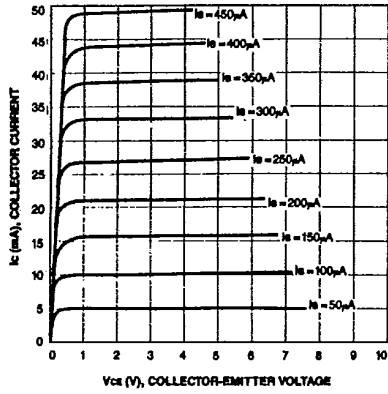
**h<sub>FE</sub> CLASSIFICATION**

Classification	O	Y
h <sub>FE</sub>	70-140	120-240

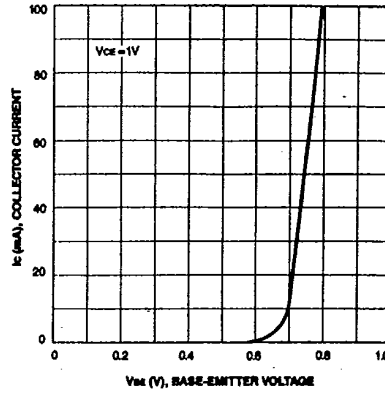
Marking



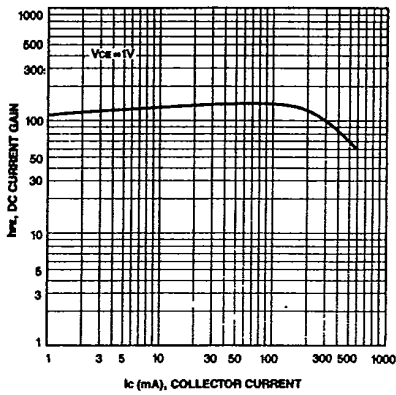
STATIC CHARACTERISTIC



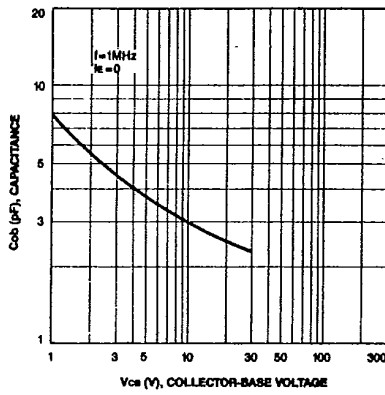
BASE-EMITTER ON VOLTAGE



DC CURRENT GAIN



COLLECTOR OUTPUT CAPACITANCE



BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE

