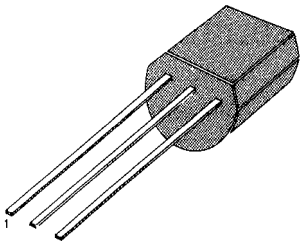
SS9015 PNP EPITAXIAL SILICON TRANSISTOR

LOW FREQUENCY, LOW NOISE AMPLIFIER

- Complement to SS9014

TO-92



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Collector Dissipation	P_C	450	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	-50			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C = -1mA, I_B =0	-45			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E = -100μA, I_C =0	-5			V
Collector Cut-off Current	I_{CBO}	V_{CB} = -50V, I_E =0			-50	nA
Emitter Cut-off Current	I_{EBO}	V_{EB} = -5V, I_C =0			-50	nA
DC Current Gain	h_{FE}	V_{CE} = -5V, I_C = -1mA	60	200	600	
Collector-Base Saturation Voltage	V_{CE} (sat)	I_C = -100mA, I_B = -5mA		-0.2	-0.7	
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C = -100mA, I_B = -5mA		-0.82	-1.0	V
Base-Emitter On Voltage	V_{BE} (on)	V_{CE} = -5V, I_C = -2mA	-0.6	-0.65	-0.75	V
Output Capacitance	C_{OB}	V_{CB} = -10V, I_E =0 f=1MHz		4.5	7.0	pF
Current Gain-Bandwidth Product	f_T	V_{CE} = -5V, I_C = -10mA	100	190		MHz
Noise Figure	NF	V_{CE} = -5V, I_C = -0.2mA f=1KHz, R_S=1KΩ		0.7	10	dB

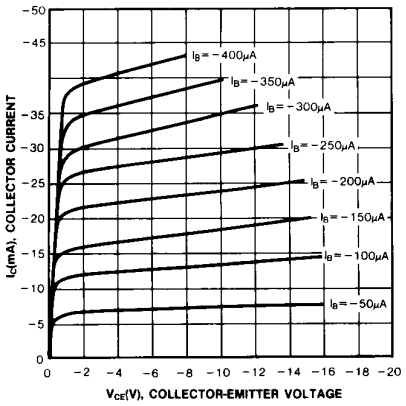
h_{FE} CLASSIFICATION

Classification	A	B	C
h_{FE}	60-150	100-300	200-600

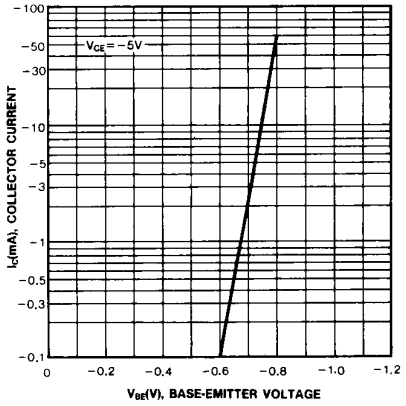
Rev. B

FAIRCHILD SEMICONDUCTOR TM

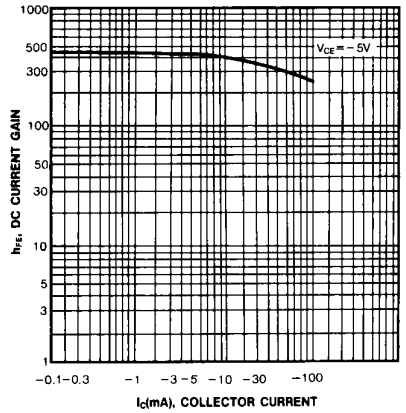
STATIC CHARACTERISTIC



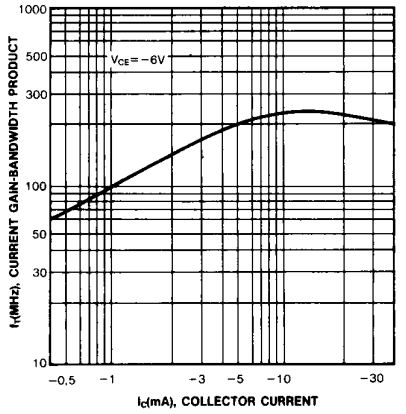
BASE-EMITTER ON VOLTAGE



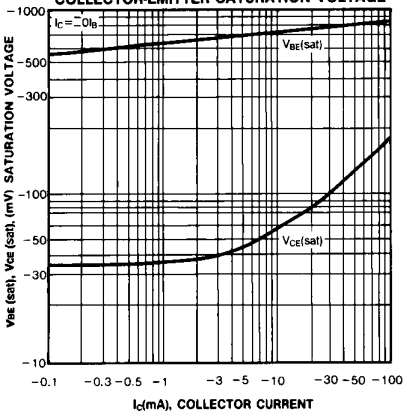
DC CURRENT GAIN



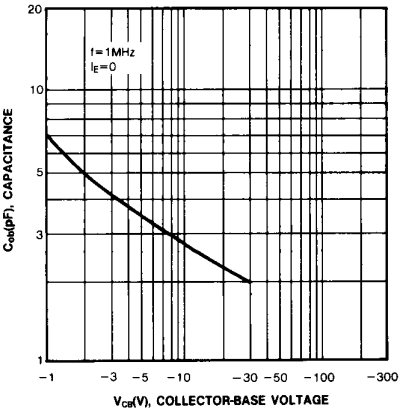
CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



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