

SS9015

PNP EPITAXIAL SILICON TRANSISTOR

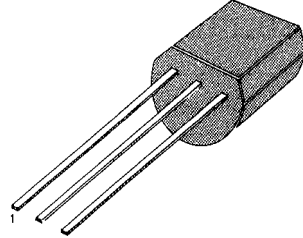
LOW FREQUENCY, LOW NOISE AMPLIFIER

- Complement to SS9014

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

TO-92



1. Emitter 2. Base 3. Collector

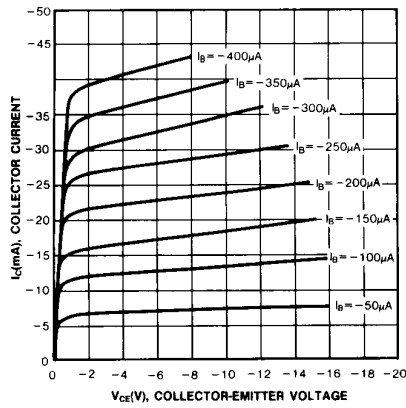
ELECTRICAL CHARACTERISTICS (T_A=25 °C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C = -100 μA, 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 = -100 μA, 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	V
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

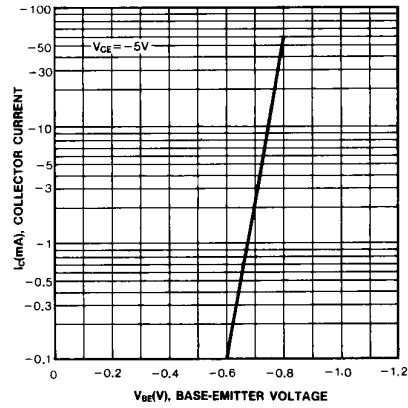
h_{FE} CLASSIFICATION

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

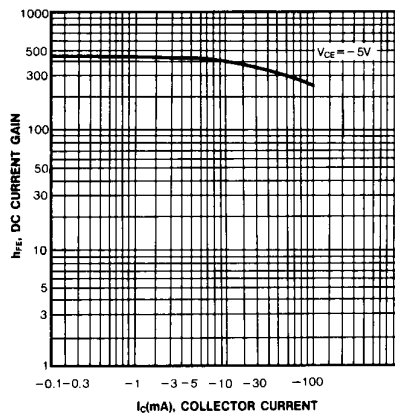
STATIC CHARACTERISTIC



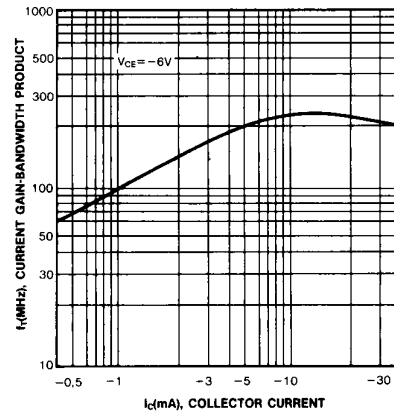
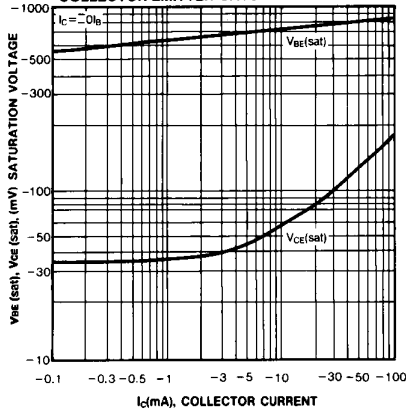
BASE-EMITTER ON VOLTAGE



DC CURRENT GAIN



CURRENT GAIN-BANDWIDTH PRODUCT

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

COLLECTOR OUTPUT CAPACITANCE

