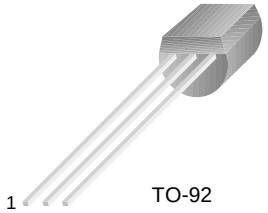
FAIRCHILD
SEMICONDUCTOR®

SS9015

Low Frequency, Low Noise Amplifier

- Complement to SS9014



TO-92

1. Emitter 2. Base 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-100	A
P_C	Collector Power Dissipation	450	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = -100μA, I_E =0	-50			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = -1mA, I_B =0	-45			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = -100μA, I_C =0	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = -50V, I_E =0			-50	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = -5V, I_C =0			-50	nA
h_{FE}	DC Current Gain	V_{CE} = -5V, I_C = -1mA	60	200	600	
V_{CE} (sat)	Collector-Base Saturation Voltage	I_C = -100mA, I_B = -5mA		-0.2	-0.7	
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C = -100mA, I_B = -5mA		-0.82	-1.0	V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE} = -5V, I_C = -2mA	-0.6	-0.65	-0.75	V
C_{ob}	Output Capacitance	V_{CB} = -10V, I_E =0 f=1MHz		4.5	7.0	pF
f_T	Current Gain Bandwidth Product	V_{CE} = -5V, I_C = -10mA	100	190		MHz
NF	Noise Figure	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

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Typical Characteristics

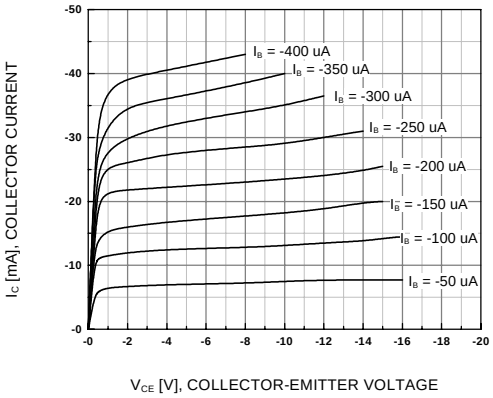

Figure 1. Static Characteristic

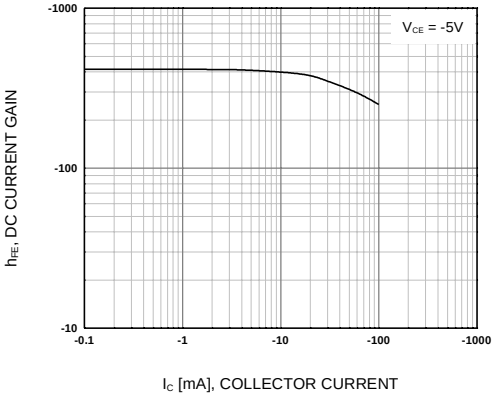

Figure 2. DC current Gain

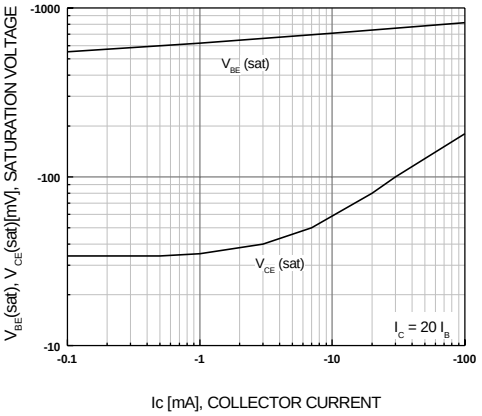

Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

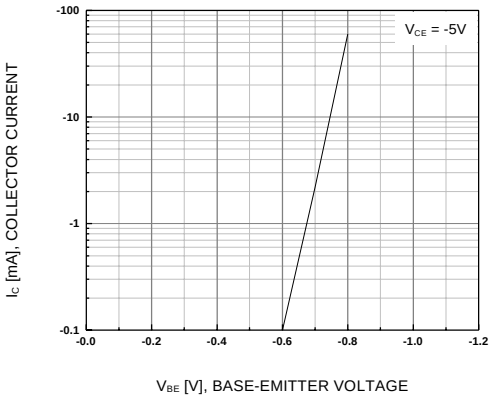

Figure 4. Base-Emitter On Voltage

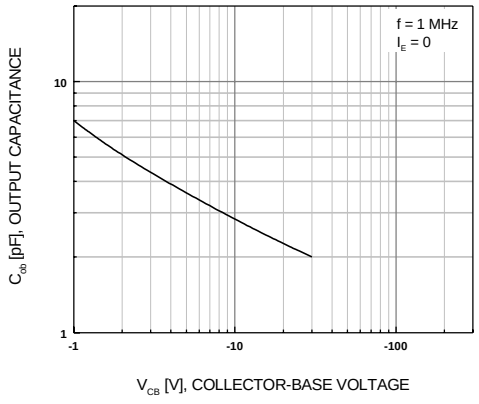

Figure 5. Collector Output Capacitance

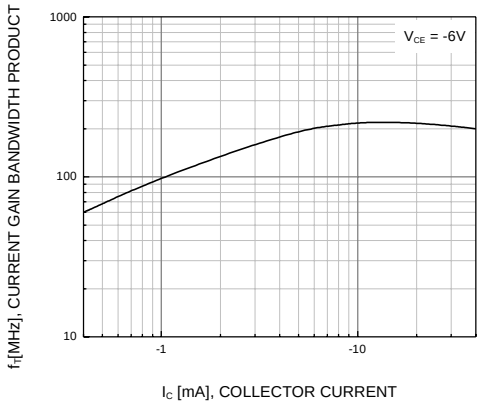

Figure 6. Current Gian Bandwidth Product

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Package Demensions

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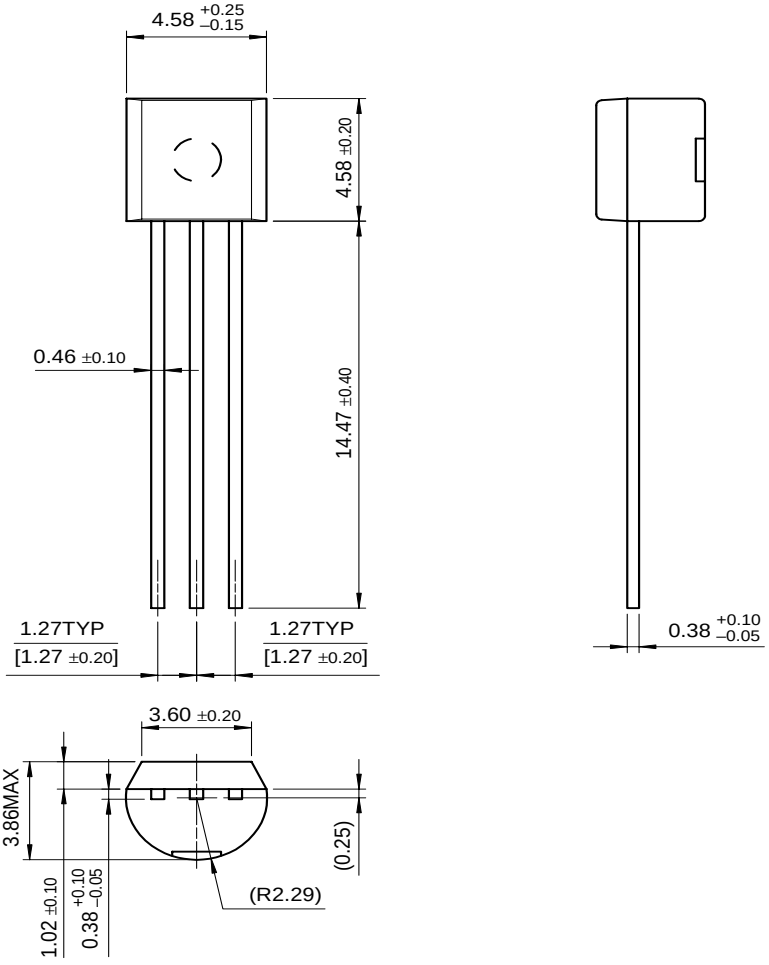

Dimensions in Millimeters

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EcoSPARK™	ISOPLANAR™	QS™	TruTranslation™
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EnSigna™	MicroFET™	Quiet Series™	UHC™
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