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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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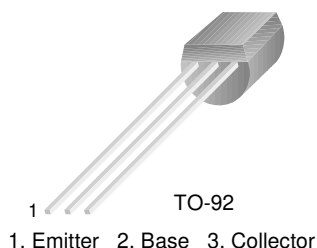
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SS9011

**AM Converter, AM/FM IF Amplifier
General Purpose Transistor**



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	30	mA
P_C	Collector Power Dissipation	400	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = 100\mu\text{A}, I_E = 0$	50			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = 1\text{mA}, I_B = 0$	30			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = 100\mu\text{A}, I_C = 0$	5			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = 50\text{V}, I_E = 0$			100	nA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = 5\text{V}, I_C = 0$			100	nA
h_{FE}	DC Current Gain	$V_{CE} = 5\text{V}, I_C = 1\text{mA}$	28	90	198	
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C = 10\text{mA}, I_B = 1\text{mA}$		0.08	0.3	V
$V_{BE}(\text{on})$	Base-Emitter on Voltage	$V_{CE} = 5\text{V}, I_C = 1\text{mA}$	0.65	0.7	0.75	V
C_{ob}	Output Capacitance	$V_{CB} = 10\text{V}, I_E = 0$ $f = 1\text{MHz}$	150	1.5 370		pF
f_T	Current Gain Bandwidth Product	$V_{CE} = 5\text{V}, I_C = 1\text{mA}$		2.0		MHz
NF	Noise Figure	$V_{CE} = 5\text{V}, I_C = 1.0\text{mA}$ $f = 1\text{MHz}, R_S = 500\Omega$			4.0	dB

h_{FE} Classification

Classification	D	E	F	G	H	I
h_{FE}	28 ~ 45	39 ~ 60	54 ~ 80	72 ~ 108	97 ~ 146	132 ~ 198

Typical Characteristics

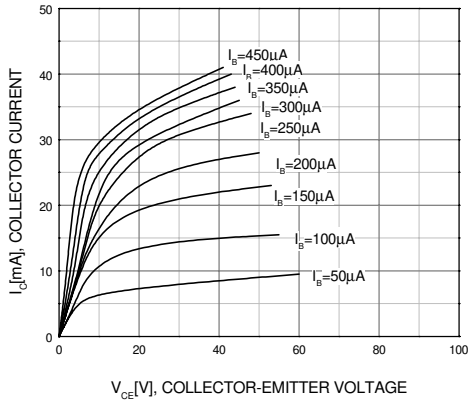


Figure 1. Static Characteristic

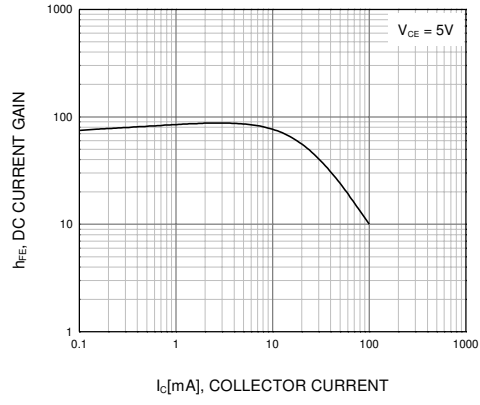


Figure 2. DC current Gain

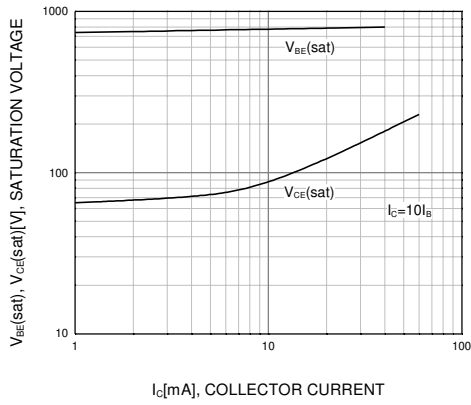


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

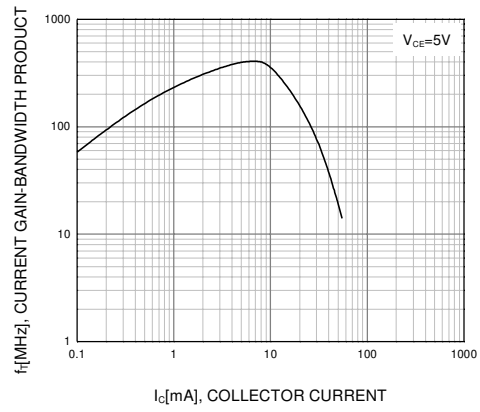
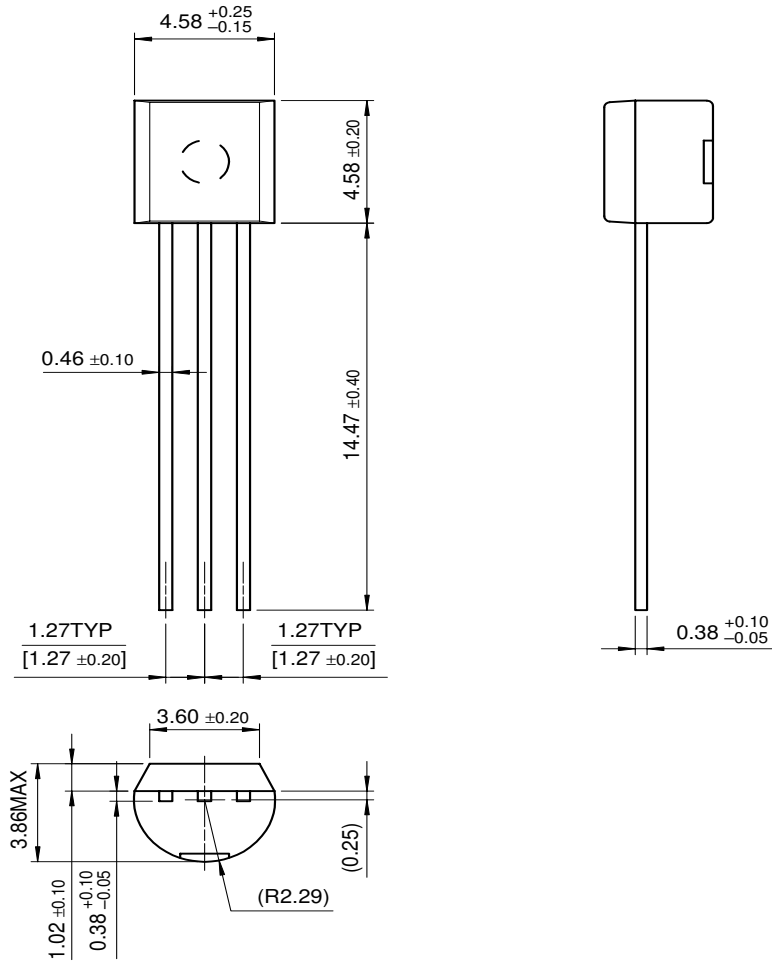


Figure 4. Current Gain Bandwidth Product

Package Dimensions

SS9011

TO-92



Dimensions in Millimeters

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