SS9012HBU Datasheet

DiGi Electronics Part Number	SS9012HBU-DG
Manufacturer	onsemi
Manufacturer Product Number	SS9012HBU
Description	TRANS PNP 20V 0.5A TO92-3
Detailed Description	Bipolar (BJT) Transistor PNP 20 V 500 mA 625 mW T hrough Hole TO-92-3

https://www.DiGi-Electronics.com

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RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
SS9012HBU	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP	500 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
20 V	600mV @ 50mA, 500mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100nA (ICBO)	144 @ 50mA, 1V
Power - Max:	Frequency - Transition:
625 mW	-
Operating Temperature:	Mounting Type:
150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-226-3, TO-92-3 (TO-226AA)	TO-92-3
Base Product Number:	
SS9012	

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8541.21.0095	

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Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild_questions@onsemi.com.

FAIRCHILD
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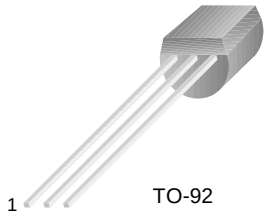
SS9012

1W Output Amplifier of Potable Radios in Class B Push-pull Operation.

- High total power dissipation. (P_T=625mW)
- High Collector Current. (I_C= -500mA)
- Complementary to SS9013
- Excellent h_{FE} linearity.



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	-40	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	625	mW
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	-40			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = -1mA, I_B =0	-20			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = -100μA, I_C =0	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = -25V, I_E =0			-100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = -3V, I_C =0			-100	nA
h_{FE1} h_{FE2}	DC Current Gain	V_{CE} = -1V, I_C = -50mA V_{CE} = -1V, I_C = -500mA	64 40	120 90	202	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C = -500mA, I_B = -50mA		-0.18	-0.6	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C = -500mA, I_B = -50mA		-0.95	-1.2	V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE} = -1V, I_C = -10mA	-0.6	-0.67	-0.7	V

h_{FE} Classification

Classification	D	E	F	G	H
h_{FE1}	64 ~ 91	78 ~ 112	96 ~ 135	112 ~ 166	144 ~ 202

Typical Characteristics

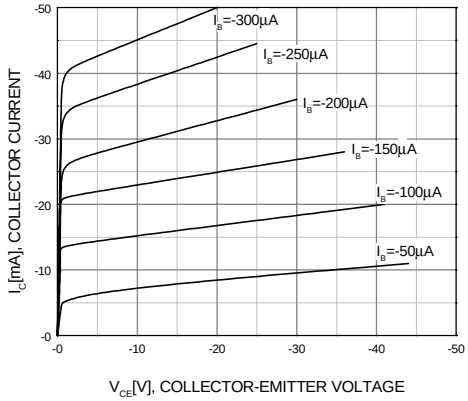


Figure 1. Static Characteristic

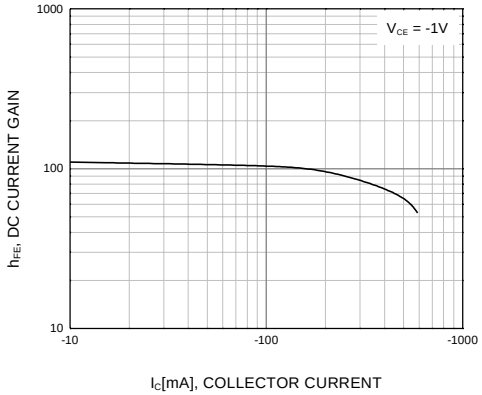


Figure 2. DC current Gain

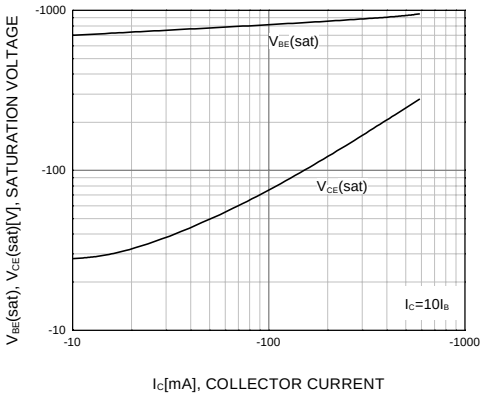


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

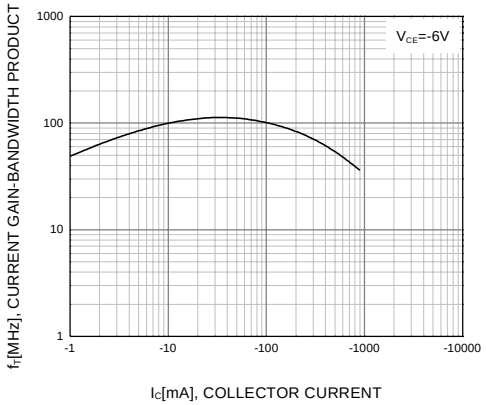
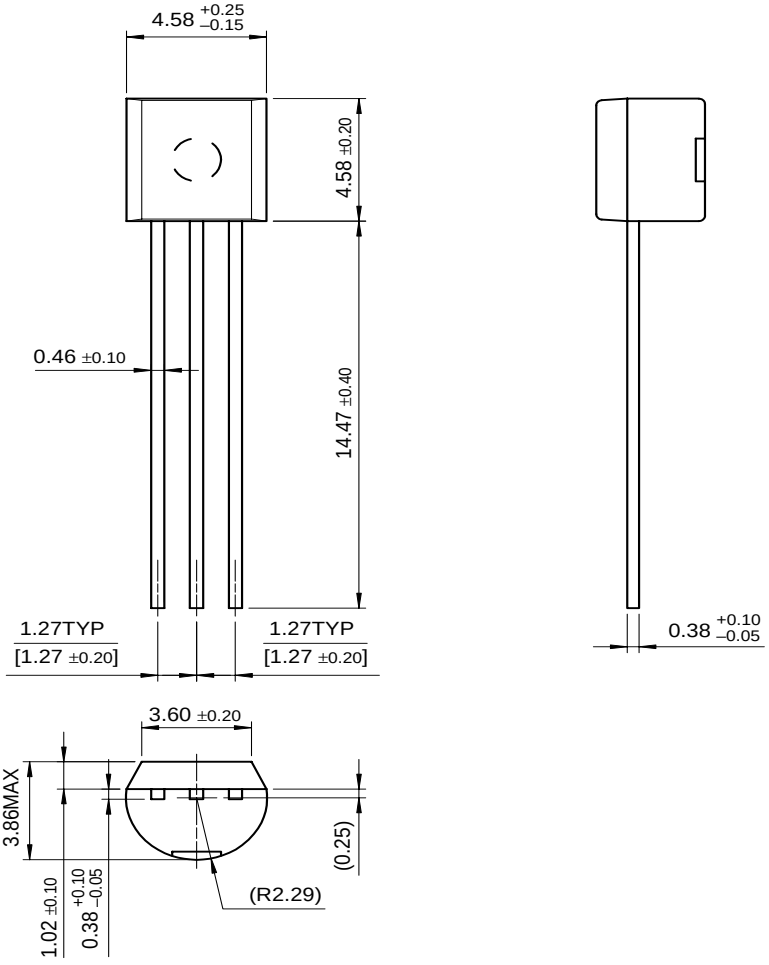


Figure 4. Current Gain Bandwidth Product

Package Dimensions

TO-92



Dimensions in Millimeters

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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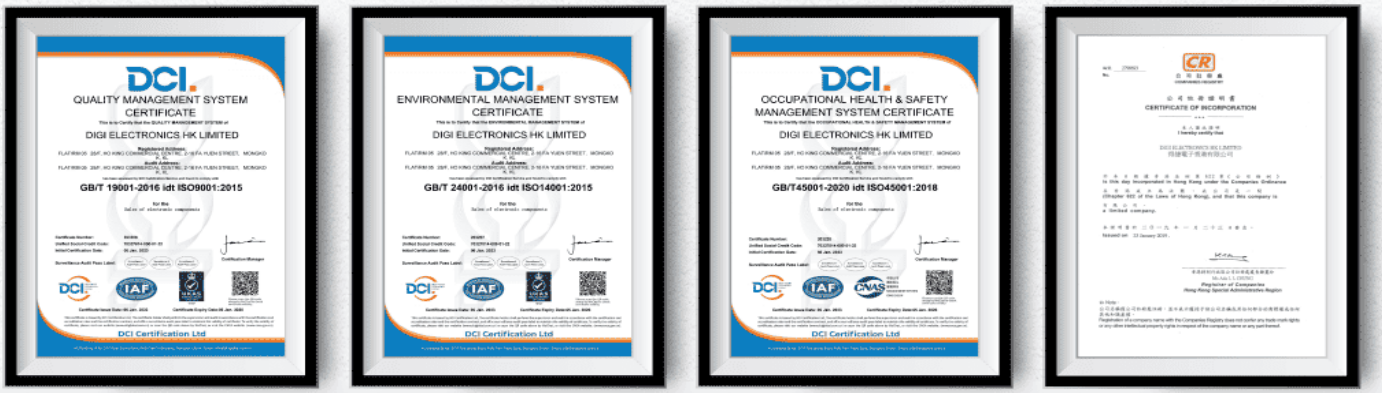

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