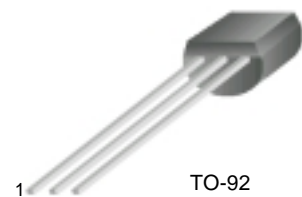


SS9013

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 SS9012
- Excellent h_{FE} linearity.



TO-92
1. Emitter 2. Base 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ C$ 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	A
P_C	Collector Dissipation	625	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ C$

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

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=100\mu A, I_E=0$	40			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=1mA, I_B=0$	20			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=100\mu A, I_C=0$	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}	DC Current Gain	$V_{CE}=1V, I_C=50mA$	64	120	202	
h_{FE2}		$V_{CE}=1V, I_C=500mA$	40	120		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=500mA, I_B=50mA$		0.16	0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=500mA, I_B=50mA$		0.91	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

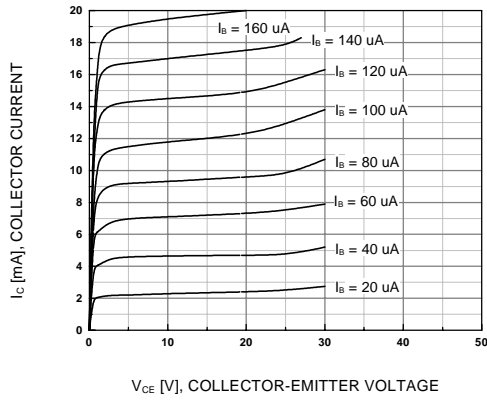


Figure 1. Static Characteristic

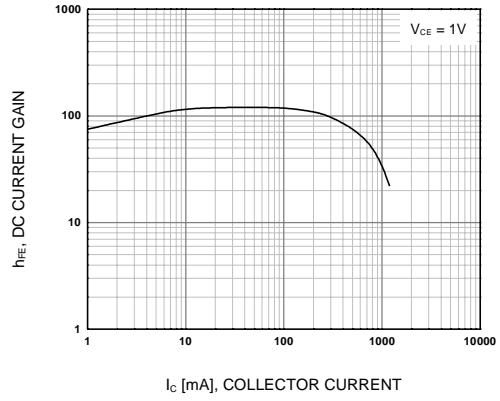


Figure 2. DC current Gain

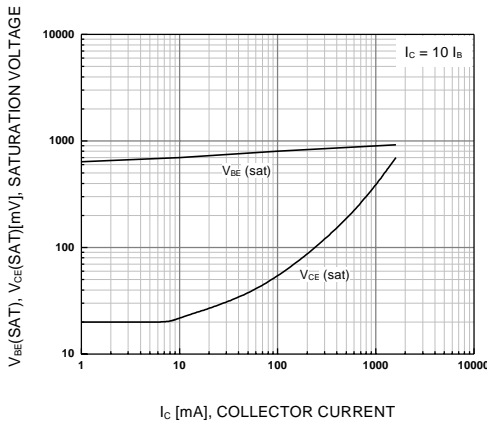


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

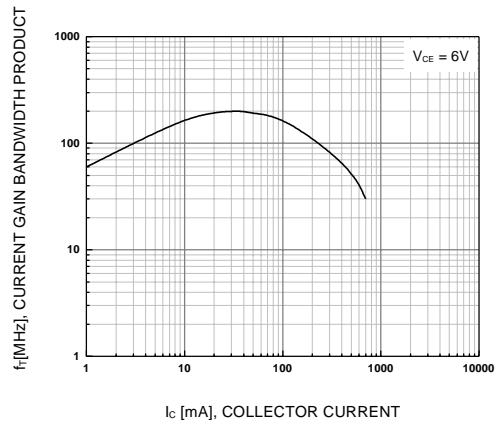
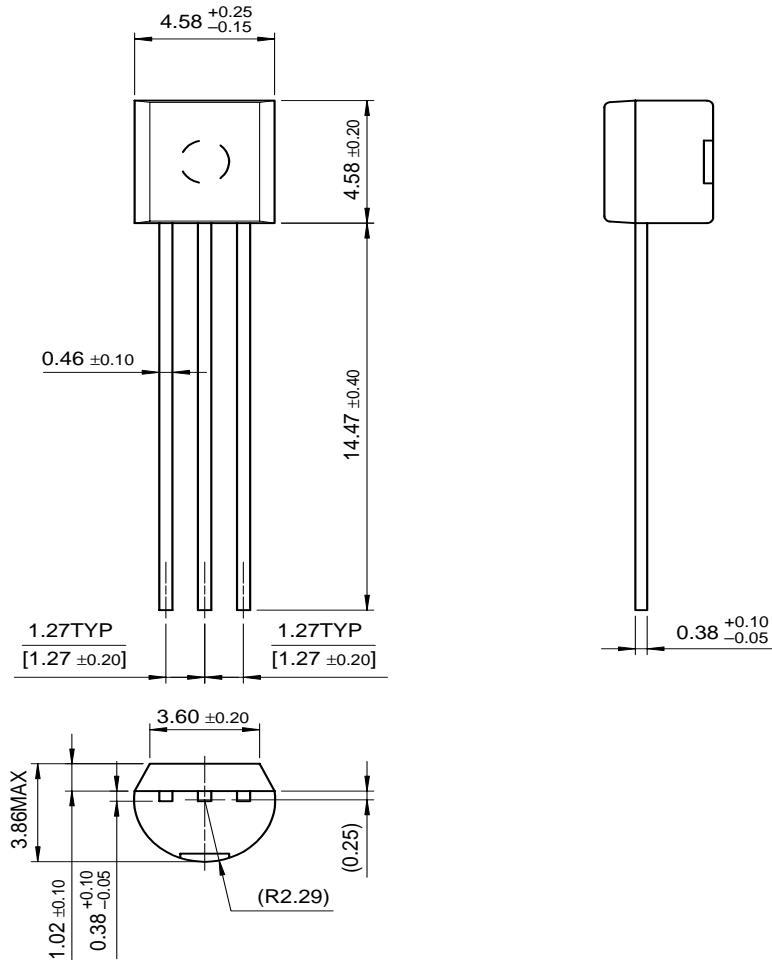


Figure 4. Current Gain Bandwidth Product

Package Dimensions

SS9013

TO-92



Dimensions in Millimeters

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FASTr™	SuperSOT™-3	
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