

## SS8550

SS8550

### 2W Output Amplifier of Portable Radios in Class B Push-pull Operation.

- Complimentary to SS8050
- Collector Current:  $I_C=1.5A$
- Collector Power Dissipation:  $P_C=2W$  ( $T_C=25^\circ C$ )



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

### PNP 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	-25	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current	-1.5	A
$P_C$	Collector Power Dissipation	1	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{STG}$	Storage Temperature	-65 ~ 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	$I_C = -2mA, I_B = 0$	-25			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = -100\mu A, I_C = 0$	-6			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = -35V, I_E = 0$			-100	nA
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = -6V, I_C = 0$			-100	nA
$h_{FE1}$	DC Current Gain	$V_{CE} = -1V, I_C = -5mA$	45	170		
$h_{FE2}$		$V_{CE} = -1V, I_C = -100mA$	85	160	300	
$h_{FE3}$		$V_{CE} = -1V, I_C = -800mA$	40	80		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -800mA, I_B = -80mA$		-0.28	-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -800mA, I_B = -80mA$		-0.98	-1.2	V
$V_{BE(on)}$	Base-Emitter on Voltage	$V_{CE} = -1V, I_C = -10mA$		-0.66	-1.0	V
$C_{ob}$	Output Capacitance	$V_{CB} = -10V, I_E = 0$ $f = 1MHz$		15		pF
$f_T$	Current Gain Bandwidth Product	$V_{CE} = -10V, I_C = -50mA$	100	200		MHz

#### $h_{FE}$ Classification

Classification	B	C	D
$h_{FE2}$	85 ~ 160	120 ~ 200	160 ~ 300

# Typical Characteristics

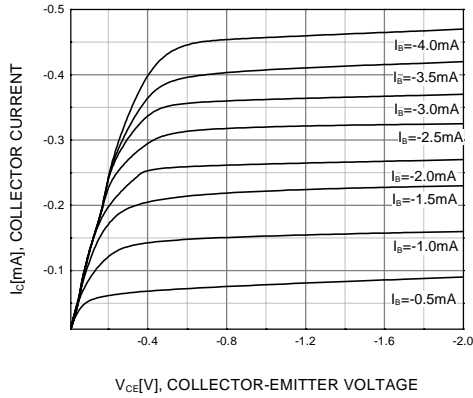


Figure 1. Static Characteristic

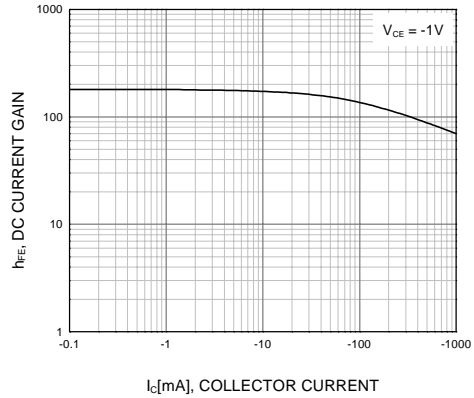


Figure 2. DC current Gain

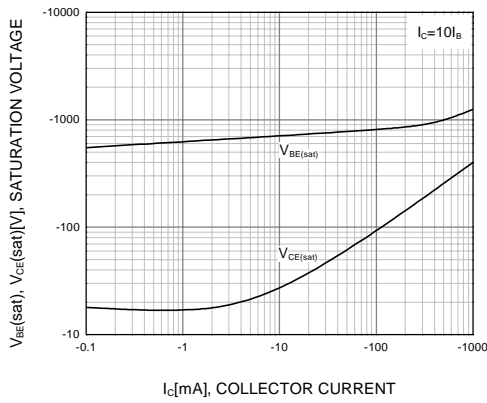


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

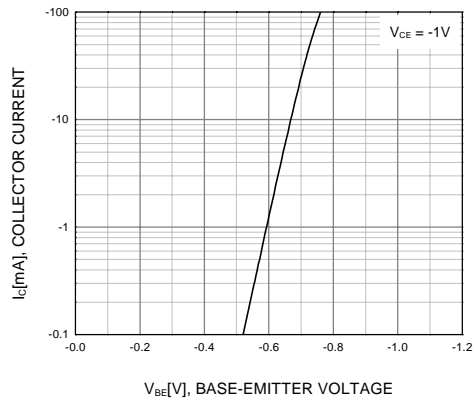


Figure 4. Base-Emitter On Voltage

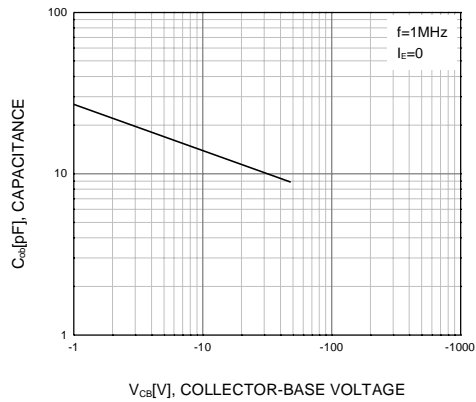


Figure 5. Collector Output Capacitance

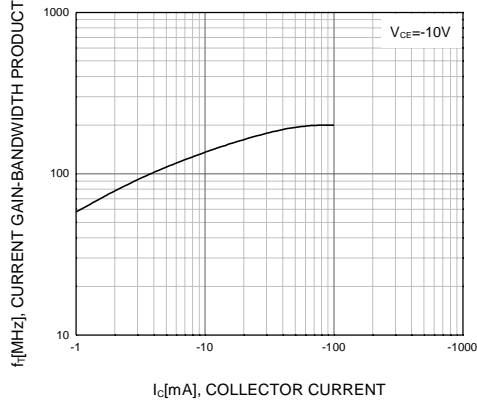
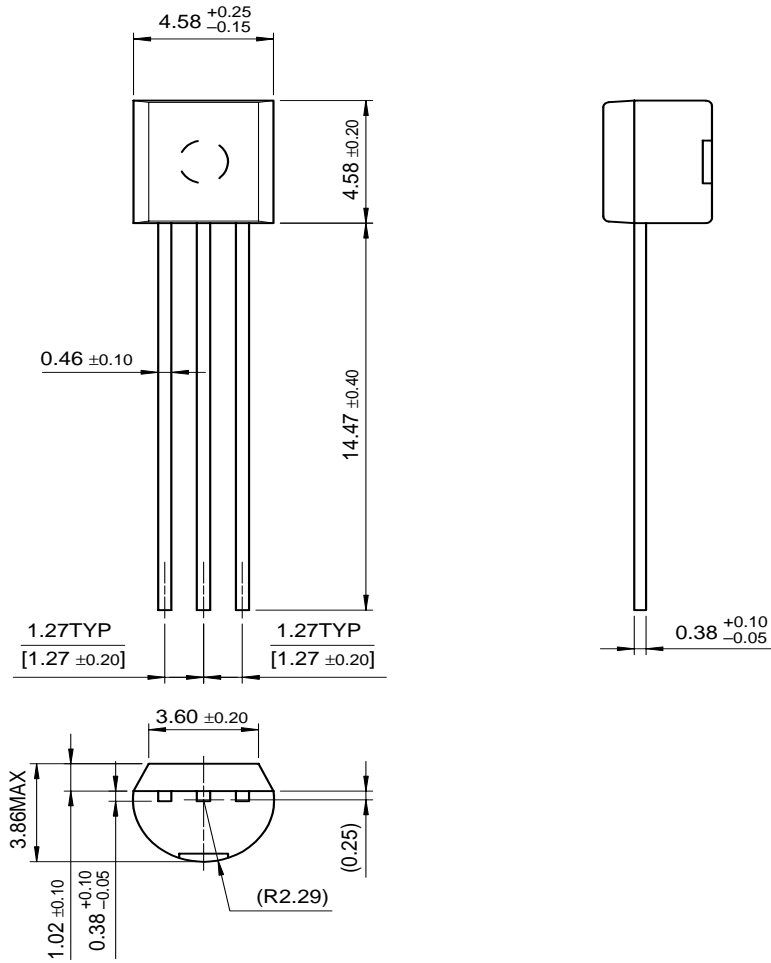


Figure 6. Current Gain Bandwidth Product

# Package Dimensions

## TO-92



Dimensions in Millimeters

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Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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SS8550

PNP Epitaxial Silicon Transistor

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Features

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- Collector Current :  $I_C = 1.5A$
- Collector Dissipation:  $P_C = 2W$  ( $T_C = 25^\circ C$ )

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Applications

**2W Output Amplifier of Portable Radios in Class B Push-pull Operation.**[back to top](#)

Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
SS8550BBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
SS8550BTA	Full Production	\$0.058	<a href="#">TO-92</a>	3	TAPE REEL
SS8550CBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
SS8550CIUBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
SS8550CTA	Full Production	\$0.058	<a href="#">TO-92</a>	3	TAPE REEL
SS8550DBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
SS8550CCHBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
SS8550DCHBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
SS8550DIUBU	Full Production	\$0.058	<a href="#">TO-92</a>	3	BULK
SS8550DTA	Full Production	\$0.058	<a href="#">TO-92</a>	3	TAPE REEL

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