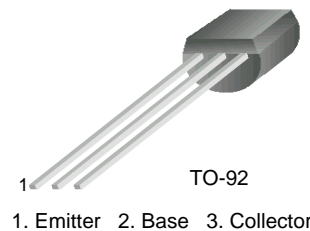


# SS8550

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

### Features

- Complimentary to SS8050
- Collector Current:  $I_C=1.5A$
- Collector Power Dissipation:  $P_C=1W$  ( $T_C=25^\circ C$ )



### 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 Performance Characteristics

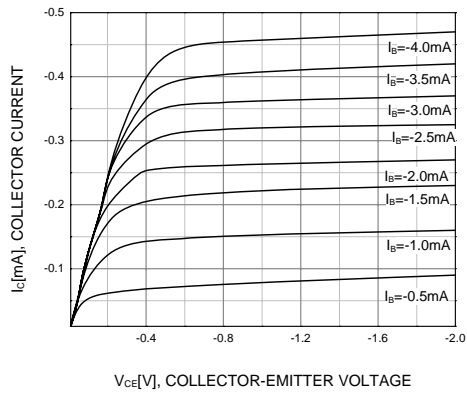


Figure 1. Static Characteristic

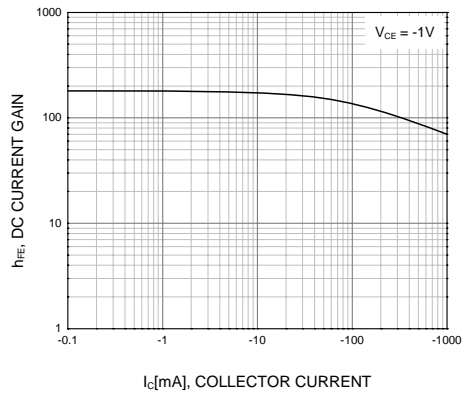


Figure 2. DC current Gain

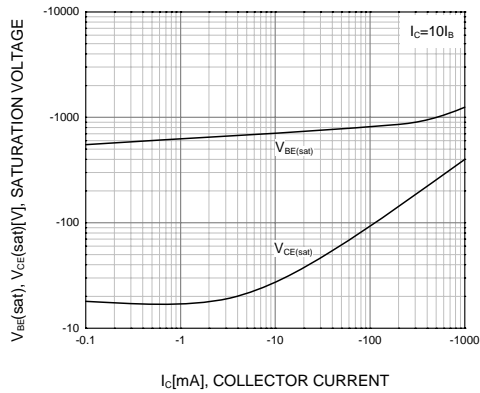


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

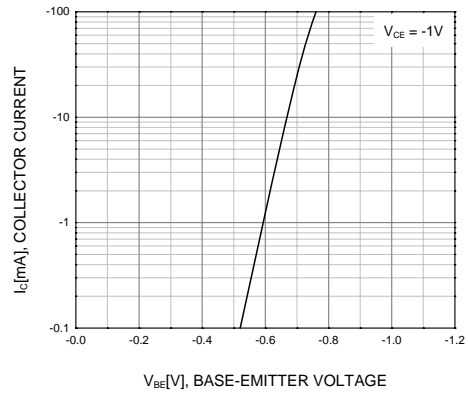


Figure 4. Base-Emitter On Voltage

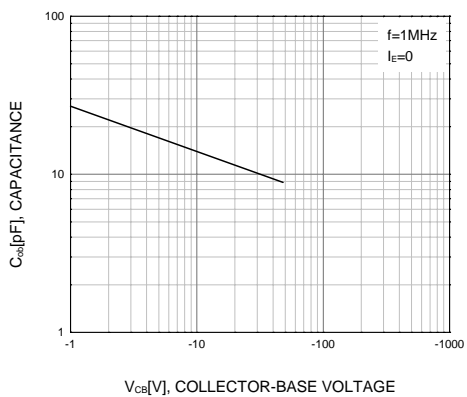


Figure 5. Collector Output Capacitance

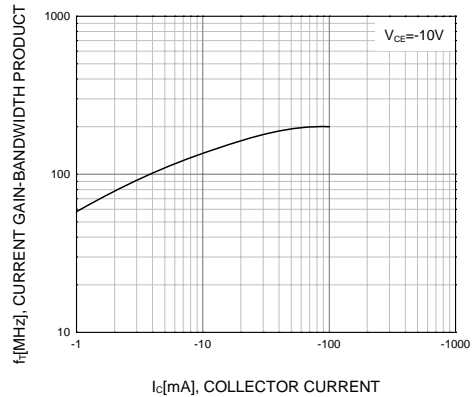




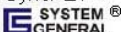


Figure 6. Current Gain Bandwidth Product



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