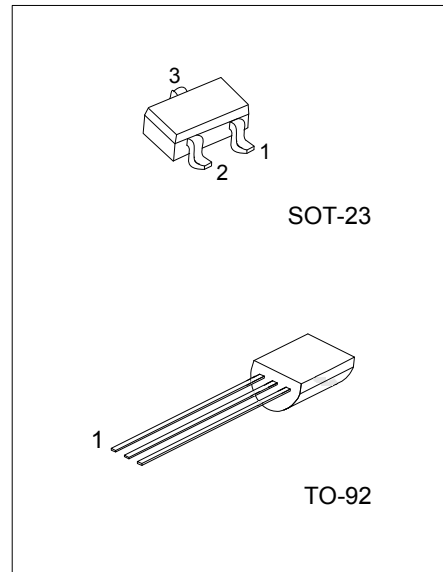




# 8550S

## PNP SILICON TRANSISTOR

LOW VOLTAGE HIGH  
CURRENT SMALL SIGNAL  
PNP TRANSISTOR



■ DESCRIPTION

The UTC **8550S** is a low voltage high current small signal PNP transistor, designed for Class B push-pull audio amplifier and general purpose applications.

■ FEATURES

- \*Collector current up to 700mA
- \*Collector-Emitter voltage up to 20 V
- \*Complimentary to 8050S

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen-Free		1	2	3	
-	8550SG-x-AE3-R	SOT-23	E	B	C	Tape Reel
8550SL-x-T92-B	8550SG-x-T92-B	TO-92	E	C	B	Tape Box
8550SL-x-T92-K	8550SG-x-T92-K	TO-92	E	C	B	Bulk

Note: Pin Assignment: E: Emitter C: Collector B: Base

<p>8550SG-x-AE3-R</p>	<p>(1) B: Tape Box, K: Bulk, R: Tape Reel                  (2) AE3: SOT-23, T92: TO-92                  (3) x: refer to Classification of <math>h_{FE2}</math>                  (4) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

SOT-23	TO-92
	<p>L: Lead Free G: Halogen Free</p>

■ ABSOLUTE MAXIMUM RATINGS (  $T_A=25^\circ\text{C}$ , unless otherwise specified )

PARAMETER		SYMBOL	RATING	UNITS
Collector-Base Voltage		$V_{CB0}$	-30	V
Collector-Emitter Voltage		$V_{CEO}$	-20	V
Emitter-Base Voltage		$V_{EBO}$	-5	V
Collector Current		$I_C$	-700	mA
Collector Dissipation( $T_a=25^\circ\text{C}$ )	SOT-23	$P_C$	350	mW
	TO-92		1	W
Junction Temperature		$T_J$	+150	$^\circ\text{C}$
Storage Temperature		$T_{STG}$	-40 ~ +150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

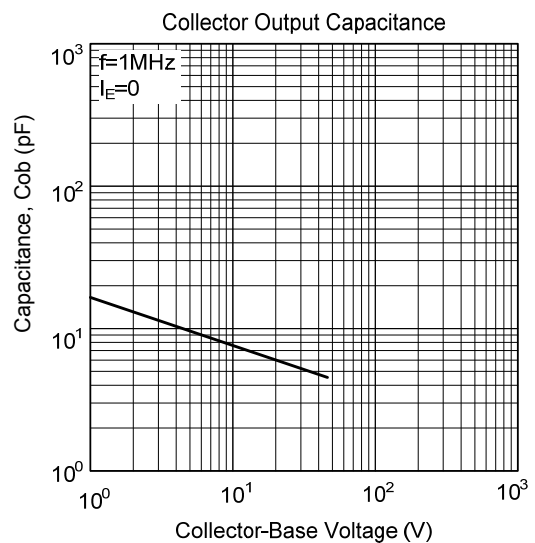
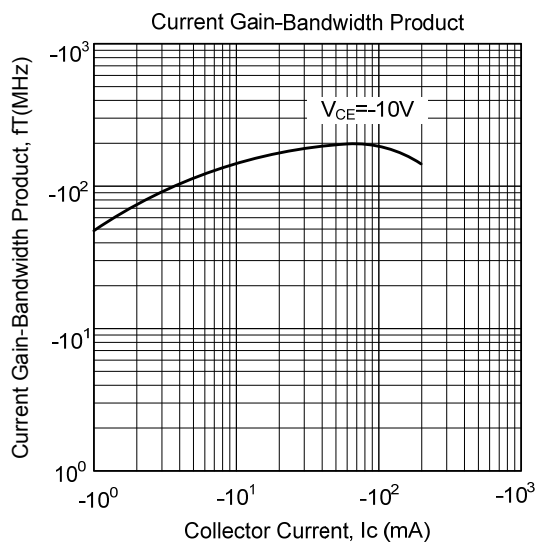
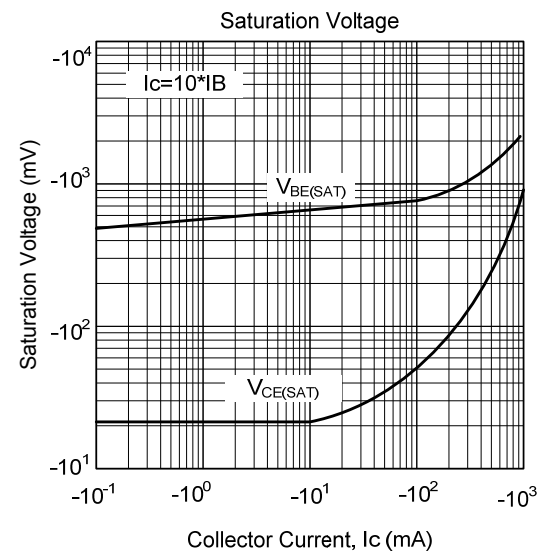
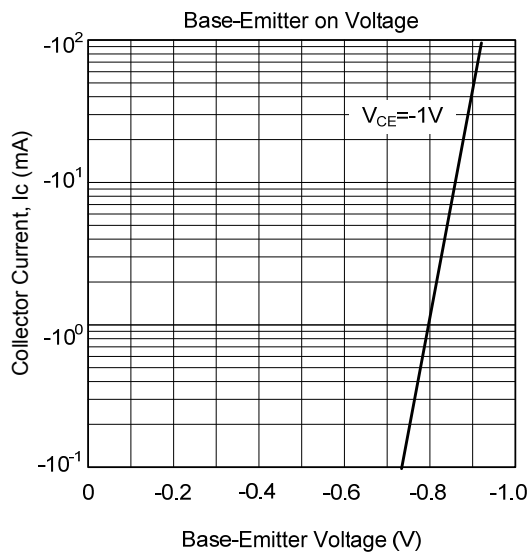
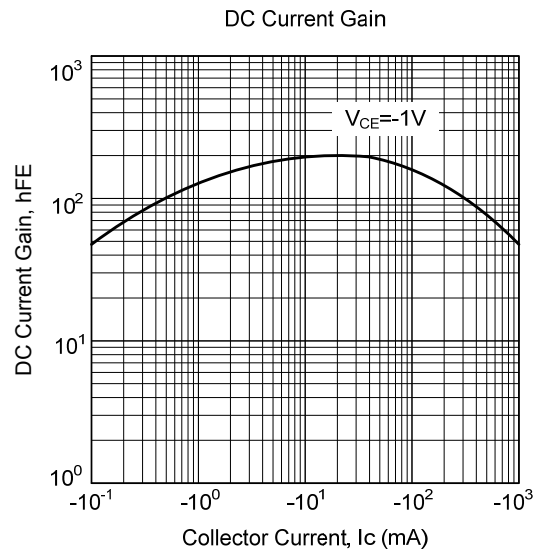
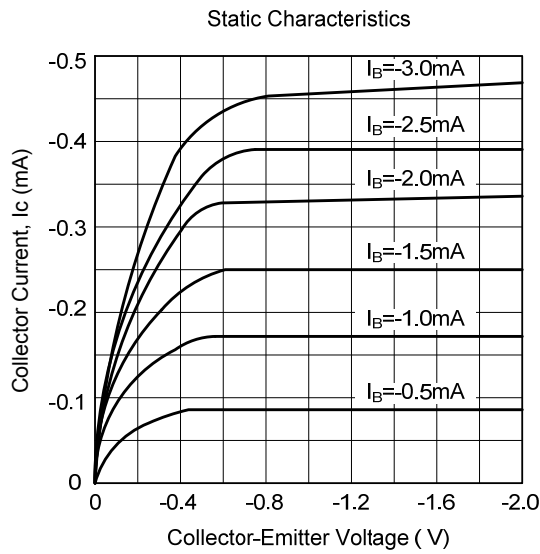
■ ELECTRICAL CHARACTERISTICS (  $T_A=25^\circ\text{C}$ , unless otherwise specified )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CB0}$	$I_C=-100\mu\text{A}, I_E=0$	-30			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=-1\text{mA}, I_B=0$	-20			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector Cut-off Current	$I_{CB0}$	$V_{CB}=-30\text{V}, I_E=0$			-1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
DC Current Gain	$h_{FE1}$	$V_{CE}=-1\text{V}, I_C=-1\text{mA}$	100			
	$h_{FE2}$	$V_{CE}=-1\text{V}, I_C=-150\text{mA}$	120		400	
	$h_{FE3}$	$V_{CE}=-1\text{V}, I_C=-500\text{mA}$	40			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-1.2	V
Base-Emitter Saturation Voltage	$V_{BE}$	$V_{CE}=-1\text{V}, I_C=-10\text{mA}$			-1.0	V
Current Gain Bandwidth Product	$f_T$	$V_{CE}=-10\text{V}, I_C=-50\text{mA}$	100			MHz
Output Capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		9.0		pF

■ CLASSIFICATION OF  $h_{FE2}$

RANK	C	D	E
RANGE	120-200	160-300	280-400

## ■ TYPICAL CHARACTERISTICS



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