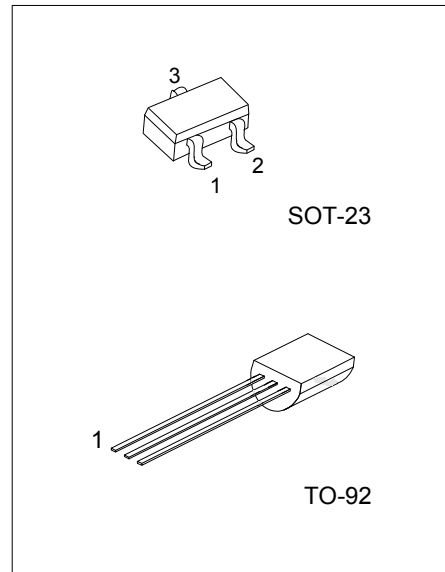




8550S

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	
8550SL-x-AE3-R	8550SG-x-AE3-R	SOT-23	B	E	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: B: Base E: Emitter C: Collector

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

SOT-23	TO-92

■ 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.

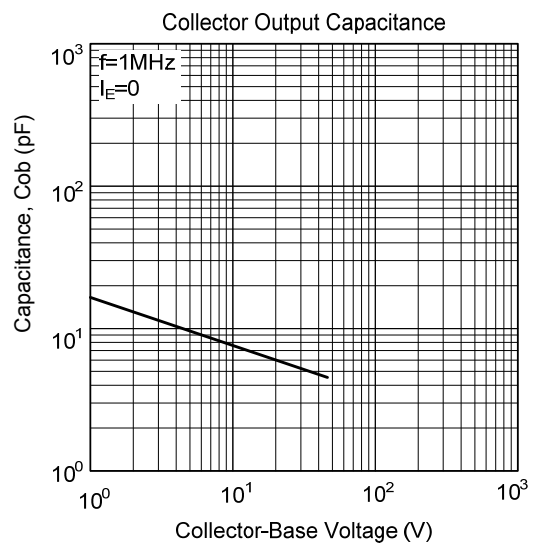
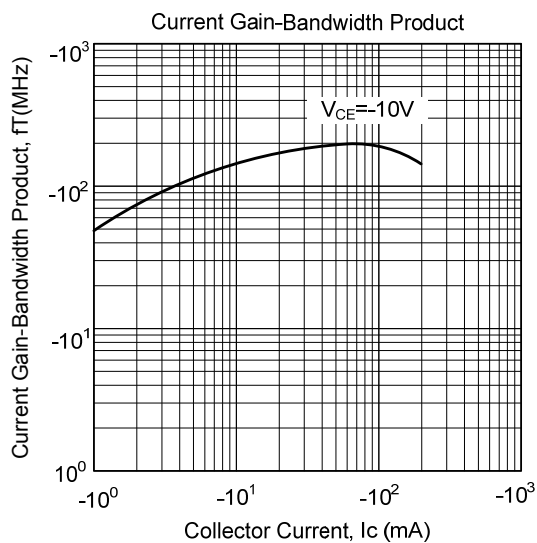
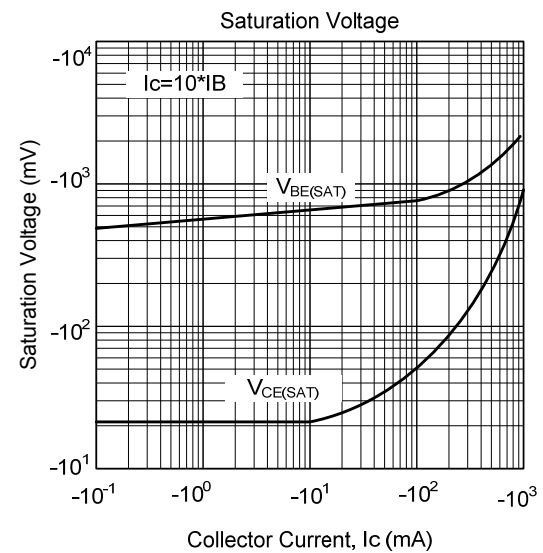
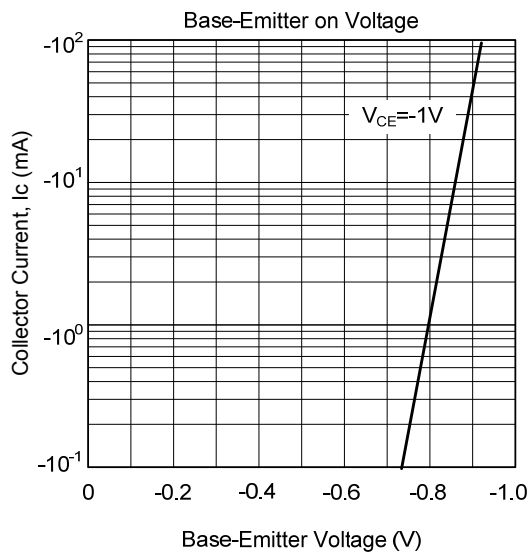
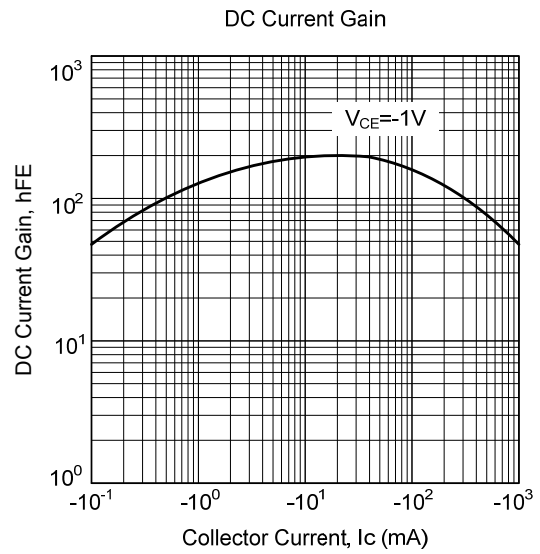
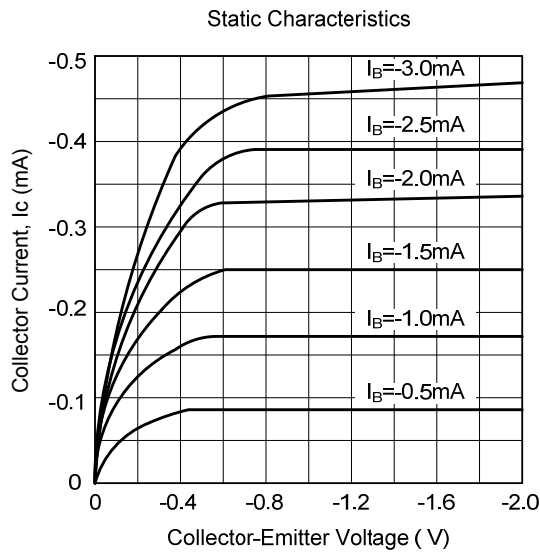
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

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_{CBO}	$V_{CB}=-30\text{V}$, $I_E=0$			-1	μA
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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