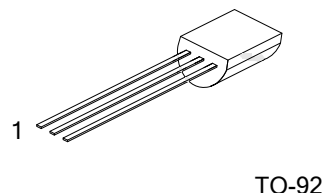


**S8550****NPN SILICON TRANSISTOR****LOW VOLTAGE HIGH
CURRENT SMALL SIGNAL PNP
TRANSISTOR****■ DESCRIPTION**

The UTC **S8550** 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
- * Complementary to UTC S8050

**■ ORDERING INFORMATION**

Order Number		Package	Pin Assignment			Packing
Lead Free Plating	Halogen Free		1	2	3	
S8550L-x-T92-B	S8550G-x-T92-B	TO-92	E	B	C	Tape Box
S8550L-x-T92-K	S8550G-x-T92-K	TO-92	E	B	C	Bulk

S8550L-x-T92-B (1)Packing Type (2)Package Type (3)Rank (4)Lead Plating	(1) B: Tape Box, K: Bulk (2) T92: TO-92 (3) x: refer to Classification of h_{FE2} (4) L: Lead Free, G: Halogen Free
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■ **ABSOLUTE MAXIMUM RATING** ($T_A=25^\circ\text{C}$, unless otherwise specified.)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-700	mA
Collector Dissipation ($T_A=25^\circ\text{C}$)	P_C	1	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +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.

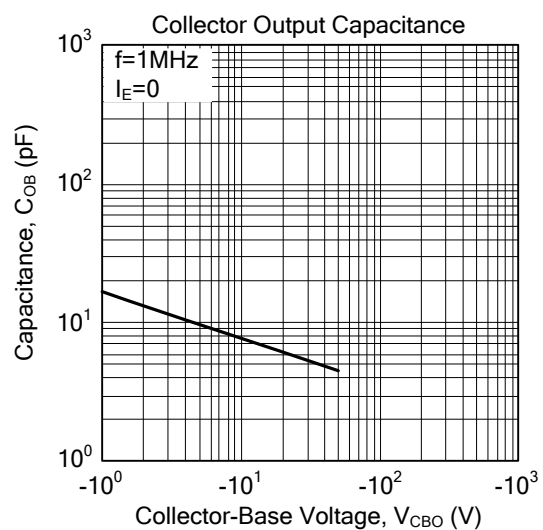
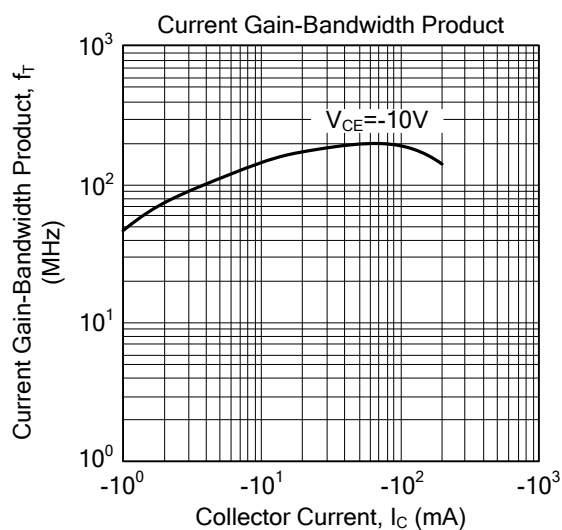
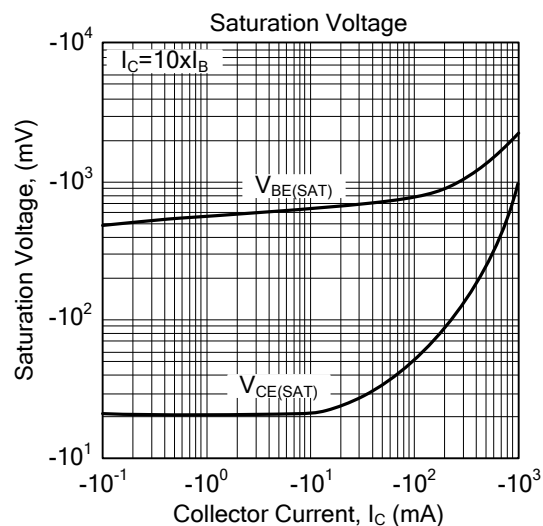
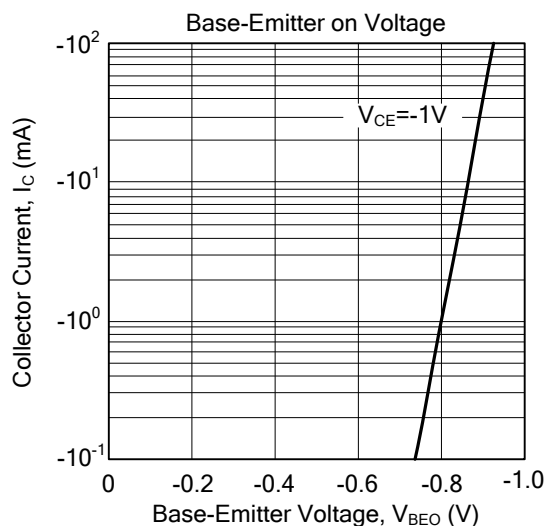
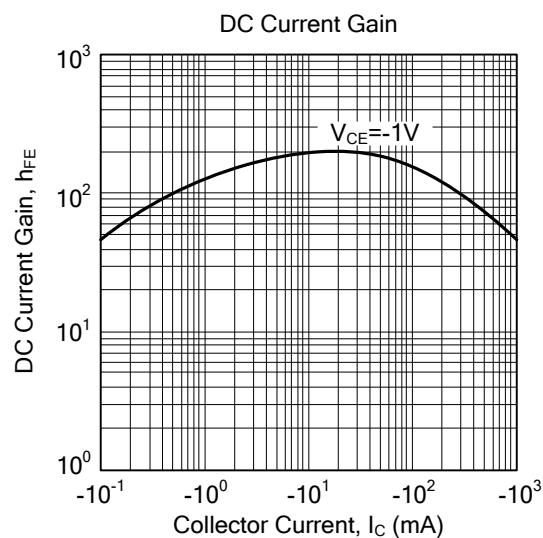
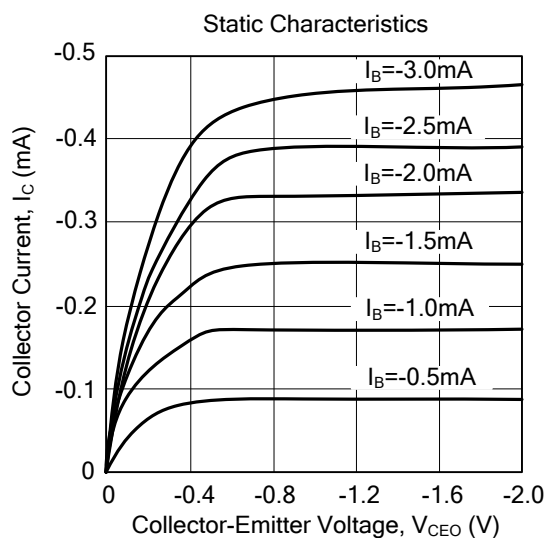
■ **ELECTRICAL CHARACTERISTICS** ($T_A=25^\circ\text{C}$, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu\text{A}$, $I_E = 0$	-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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