



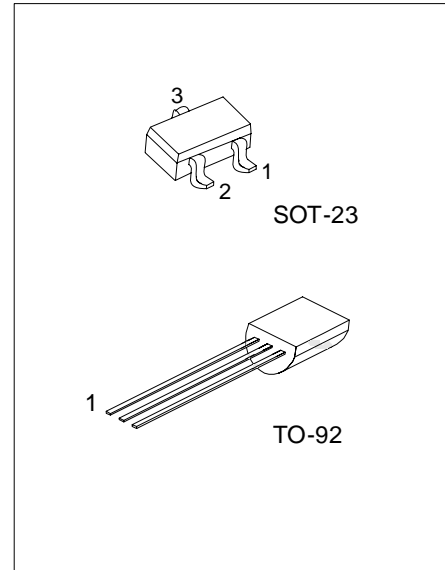
# 8550S

## PNP SILICON TRANSISTOR

LOW VOLTAGE HIGH CURRENT  
SMALL SIGNAL PNP  
TRANSISTOR

### FEATURES

- \*Collector current up to 700mA
- \*Collector-Emitter voltage up to 20 V
- \*Complimentary to 8550S



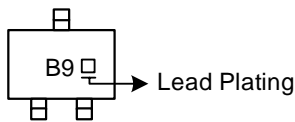
\*Pb-free plating product number: 8550SL

### ORDERING INFORMATION

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

<p>8550SL-x-AE3-R</p>	<p>(1) B: Tape Box, K: Bulk, R: Tape Reel</p> <p>(2) AE3: SOT-23, T92: TO-92</p> <p>(3) x: refer to Classification of <math>h_{FE2}</math></p> <p>(4) L: Lead Free Plating, Blank: Pb/Sn</p>
-----------------------	--

### MARKING (For SOT-23 Package)



■ ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

PARAMETER	SYMBOL	RATING	UNITS
Collector-Base Voltage	V <sub>CB0</sub>	-30	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-20	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Dissipation(Ta=25 °C)	SOT-23	350	mW
	TO-92	1	W
Collector Current	I <sub>c</sub>	-700	mA
Junction Temperature	T <sub>J</sub>	+150	°C
Storage Temperature	T <sub>STG</sub>	-40 ~ +150	°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 (Ta= 25 °C, unless otherwise specified)

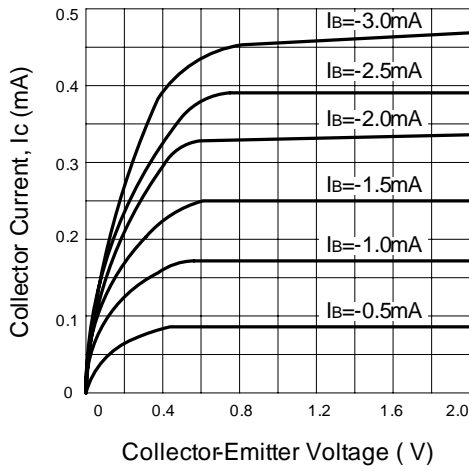
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	I <sub>c</sub> =-100μA, I <sub>E</sub> =0	-30			V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>c</sub> =-1mA, I <sub>B</sub> =0	-20			V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> =-100μA, I <sub>c</sub> =0	-5			V
Collector Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> =-30V, I <sub>E</sub> =0			-1	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>c</sub> =0			-100	nA
DC Current Gain	h <sub>FE1</sub>	V <sub>CE</sub> =-1V, I <sub>c</sub> =-1mA	100			
	h <sub>FE2</sub>	V <sub>CE</sub> =-1V, I <sub>c</sub> =-150 mA	120		400	
	h <sub>FE3</sub>	V <sub>CE</sub> =-1V, I <sub>c</sub> =-500mA	40			
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>c</sub> =-500mA, I <sub>B</sub> =-50mA			-0.5	V
Base-Emitter Saturation Voltage	V <sub>BE(SAT)</sub>	I <sub>c</sub> =-500mA, I <sub>B</sub> =-50mA			-1.2	V
Base-Emitter Saturation Voltage	V <sub>BE</sub>	V <sub>CE</sub> =-1V, I <sub>c</sub> =-10mA			-1.0	V
Current Gain Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =-10V, I <sub>c</sub> =-50mA	100			MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz		9.0		pF

■ CLASSIFICATION OF h<sub>FE2</sub>

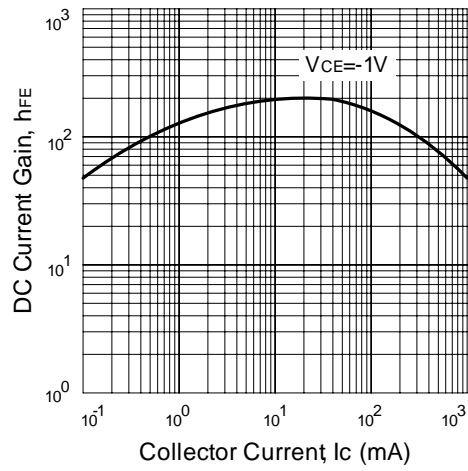
RANK	C	D	E
RANGE	120-200	160-300	280-400

TYPICAL CHARACTERISTICS

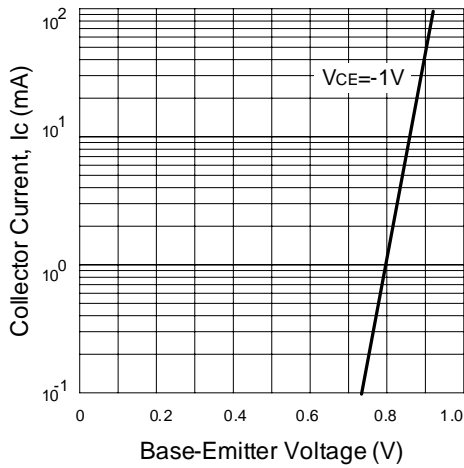
Static Characteristics



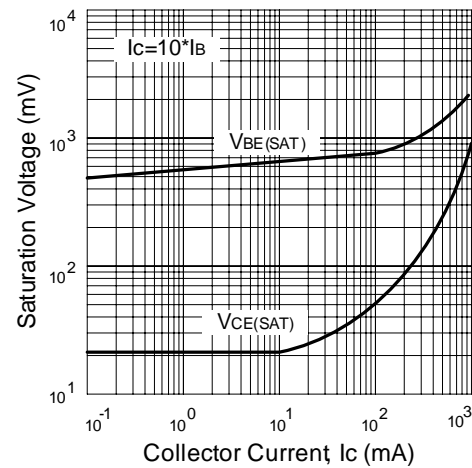
DC Current Gain



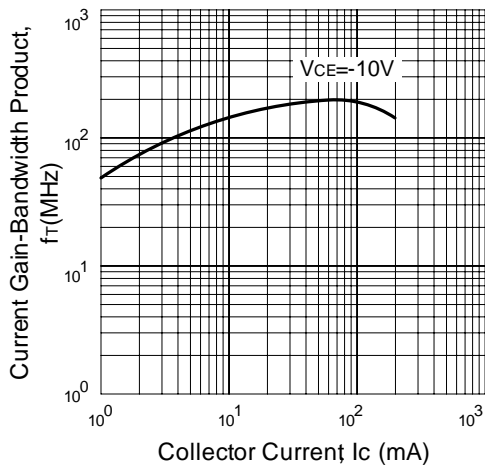
Base-Emitter on Voltage



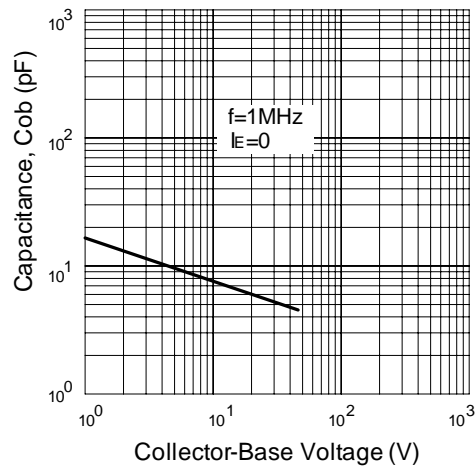
Saturation Voltage



Current Gain-Bandwidth Product



Collector Output Capacitance



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.