



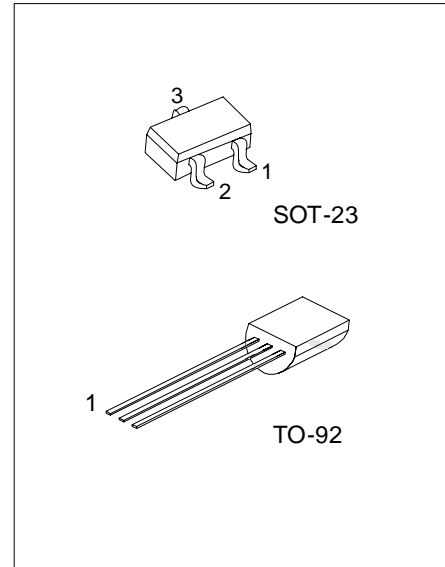
# 8550S

## 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



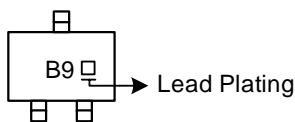
\*Pb-free plating product number: 8550SL

■ 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>
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■ 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)

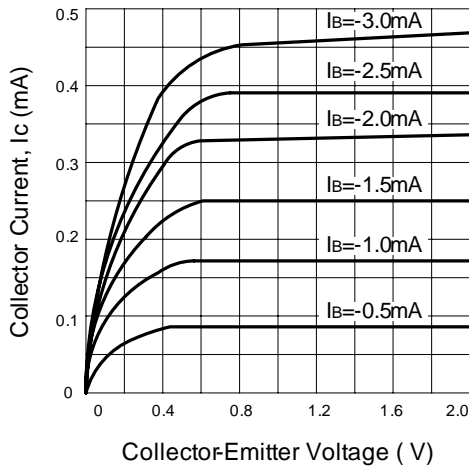
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	I <sub>c</sub> =-100μA, I <sub>E</sub> =0	-30			V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>c</sub> =-1mA, I <sub>B</sub> =0	-20			V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	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>

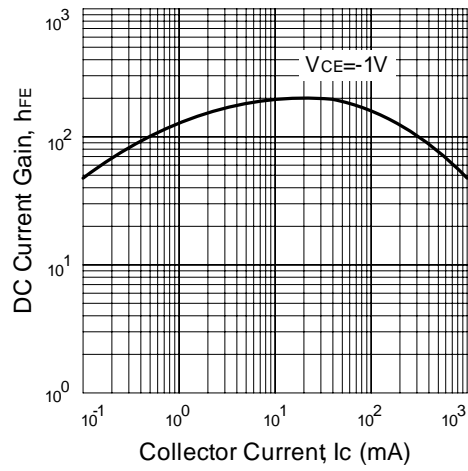
RANK	C	D	E
RANGE	120-200	160-300	280-400

TYPICAL CHARACTERISTICS

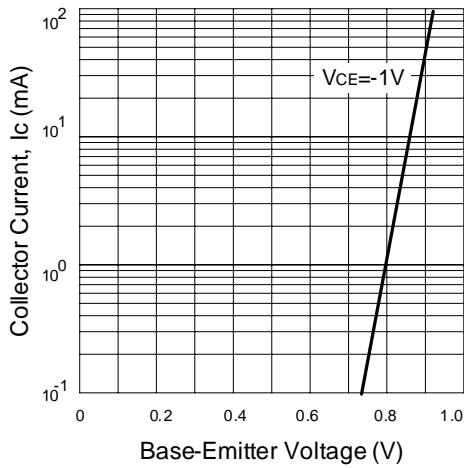
Static Characteristics



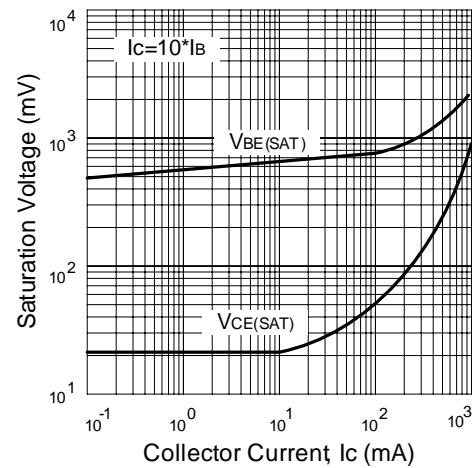
DC Current Gain



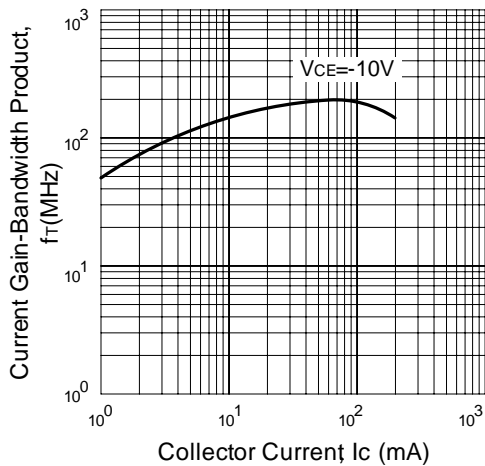
Base-Emitter on Voltage



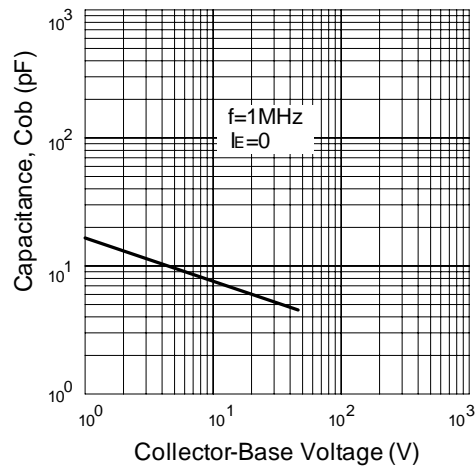
Saturation Voltage



Current Gain-Bandwidth Product



Collector Output Capacitance



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