

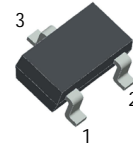


**SS8550** TRANSISTOR (PNP)

**FEATURES**

- High Collector Current
- Complementary to SS8050

**SOT - 23**



1. BASE
2. EMITTER
3. COLLECTOR

**MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	-40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-25	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current	-1.5	A
P <sub>C</sub>	Collector Power Dissipation	300	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	417	°C/W
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

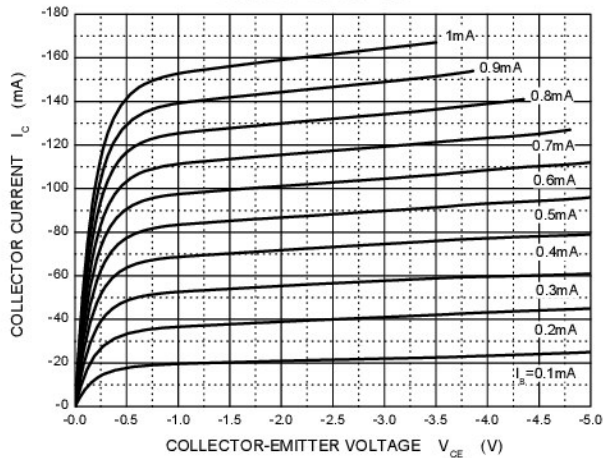
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100μA, I <sub>E</sub> =0	-40			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-0.1mA, I <sub>B</sub> =0	-25			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-40V, I <sub>E</sub> =0			-100	nA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> =-20V, I <sub>B</sub> =0			-100	nA
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>FE(1)</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA	120		400	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-800mA	40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-800mA, I <sub>B</sub> =-80mA			-0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-800mA, I <sub>B</sub> =-80mA			-1.2	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-10mA			-1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-10V, I <sub>C</sub> =-50mA, f=30MHz	100			MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz			20	pF

**CLASSIFICATION OF h<sub>FE(1)</sub>**

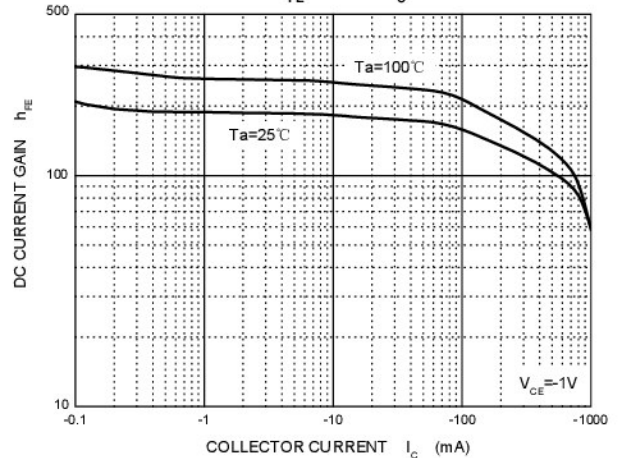
RANK	L	H	J
RANGE	120 - 200	200 - 350	300 - 400
MARKING	Y2		

# Typical Characteristics

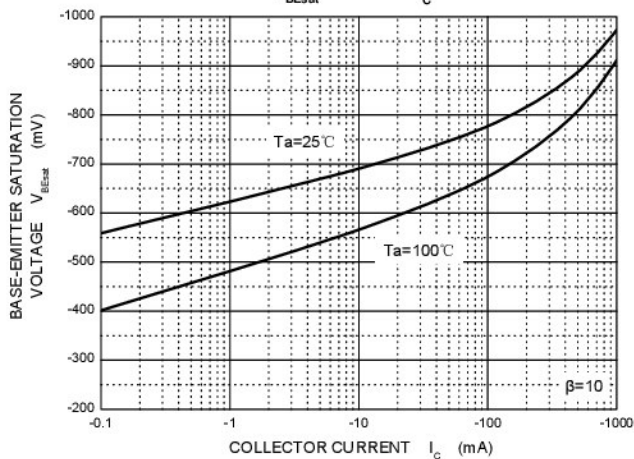
Static Characteristic



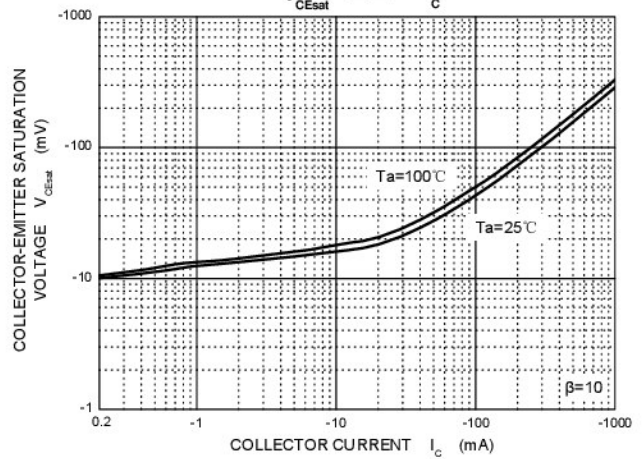
$h_{FE}$  —  $I_c$



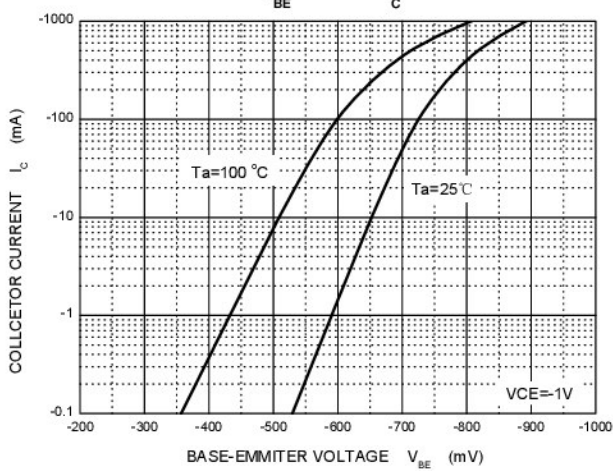
$V_{BEsat}$  —  $I_c$



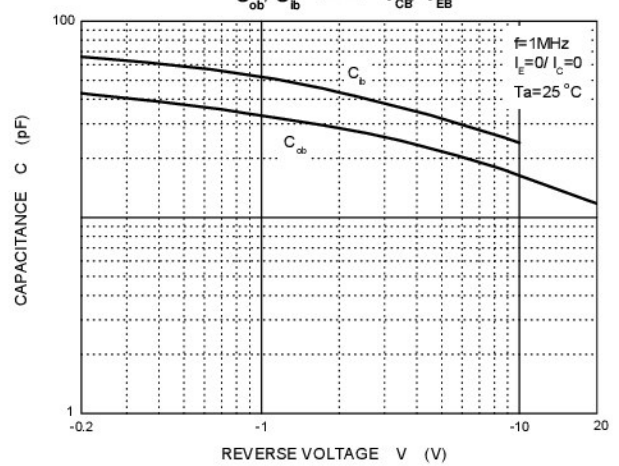
$V_{CEsat}$  —  $I_c$



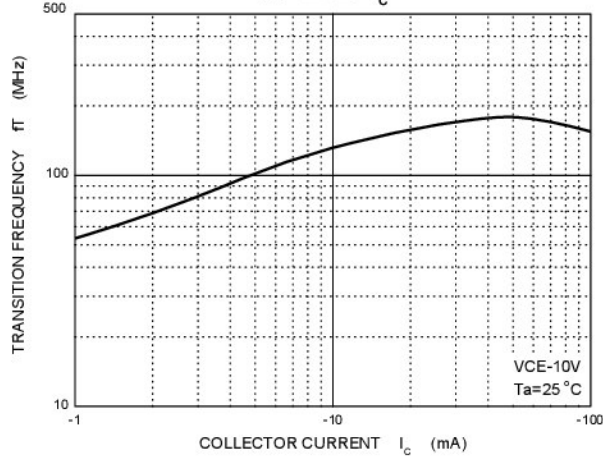
$V_{BE}$  —  $I_c$



$C_{ob}/C_{cb}$  —  $V_{CB}/V_{EB}$



$f_T$  —  $I_c$



$P_c$  —  $T_a$

