



SOT-23 Plastic-Encapsulate Transistors

SS8550 TRANSISTOR (PNP)

FEATURES

Complimentary to SS8050

MARKING: Y2

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)



Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-40	V
V_{CE0}	Collector-Emitter Voltage	-25	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_c	Collector Current -Continuous	-1.5	A
P_c	Collector Power Dissipation	0.3	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-0.1\text{mA}, I_B=0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB}=-40\text{V}, I_E=0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=-20\text{V}, I_B=0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}, I_C=-100\text{mA}$	120	400	
	$h_{FE(2)}$	$V_{CE}=-1\text{V}, I_C=-800\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-800\text{mA}, I_B=-80\text{mA}$		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-800\text{mA}, I_B=-80\text{mA}$		-1.2	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C=-1\text{V}, V_{CE}=-10\text{mA}$		-1	V
Base-emitter positive favor voltage	V_{BEF}	$I_B=-1\text{A}$		-1.55	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-50\text{mA}$ $f=30\text{MHz}$	100		MHz
output capacitance	C_{ob}	$(V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz})$		20	pF

CLASSIFICATION OF $h_{FE(1)}$

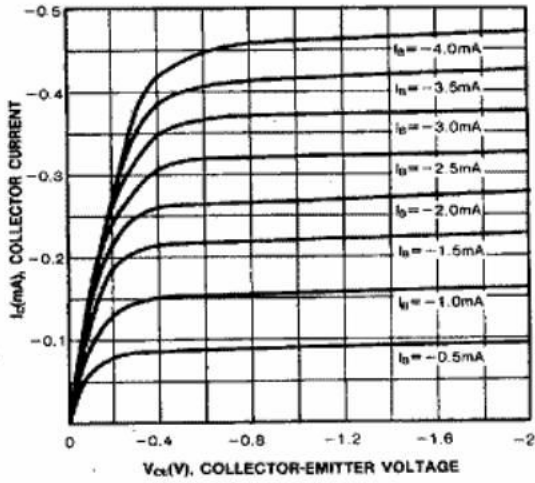
Rank	L	H	J
Range	120-200	200-350	300-400



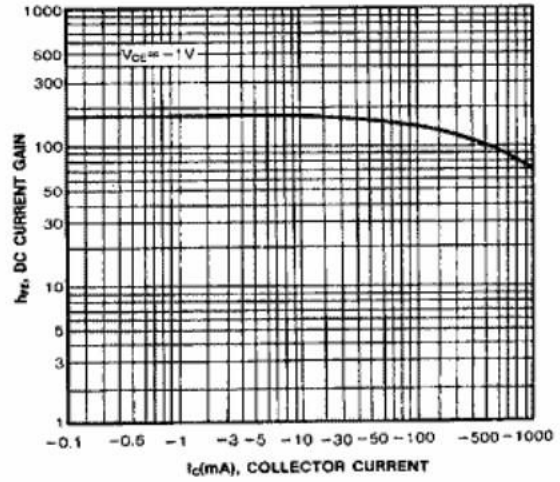
Typical characteristics

SS8550

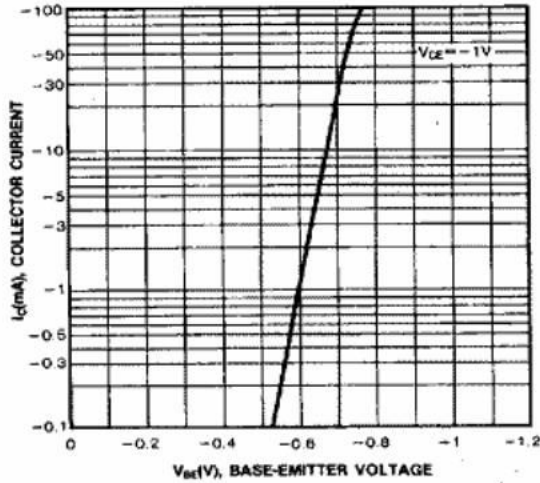
STATIC CHARACTERISTIC



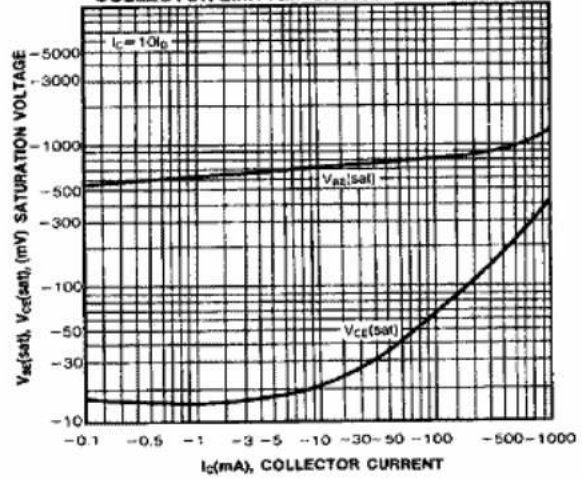
DC CURRENT GAIN



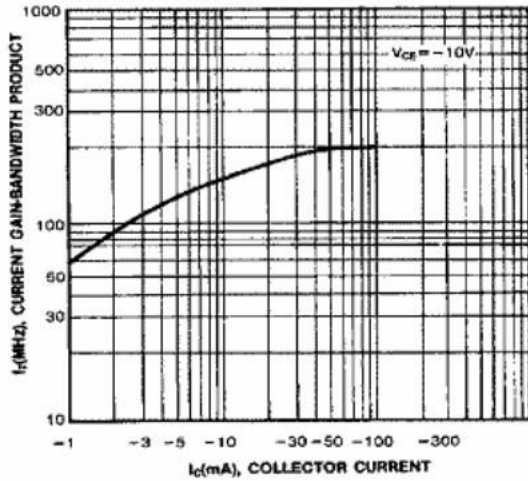
BASE-EMITTER ON VOLTAGE



BASE-EMITTER SATURATION VOLTAGE COLLECTOR-EMITTER SATURATION VOLTAGE



CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR OUTPUT CAPACITANCE

