Shenzhen Tuofeng Semiconductor Technology Co., Ltd

TO-92 Plastic-Encapsulate Transistors

SS8550 TRANSISTOR (**PNP**)

TO-92

1. EMITTER
2. BASE
3. COLLECTOR

1 2 3

FEATURES

Power dissipation

P_{CM} : 1 W (T_A=25℃)

: 2 W (T_C=25℃)

MAXIMUM RATINGS* T_A=25℃ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1500	mA
T_J, T_{stg}	Junction and Storage Temperature	-55-150	℃

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=-100uA, I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic=-0.1mA, I_B=0	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V, I_E=0			-0.1	μA
Emitter cut-off current	I_{CEO}	V_{CE}=-20V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0			-0.1	uA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-100mA	85		400	
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-800mA	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-800mA, I_B=-80mA			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-800mA, I_B=-80mA			-1.2	V
Base-emitter voltage	$V_{BE(on)}$	V_{CE}=-1V, I_C=-10mA			-1	V
Out capacitance	C_O	V_{CB}=-10V, I_E=0mA,f=1MH$_Z$			20	pF
Transition frequency	f_T	V_{CE}=-10V, I_C=-50mA,f=-30MH$_Z$	100			MHz

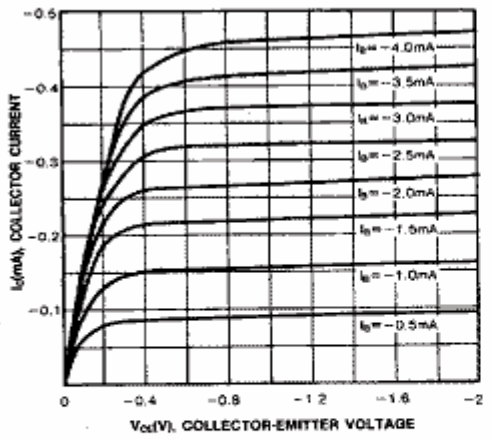
CLASSIFICATION OF $h_{FE(2)}$

Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400

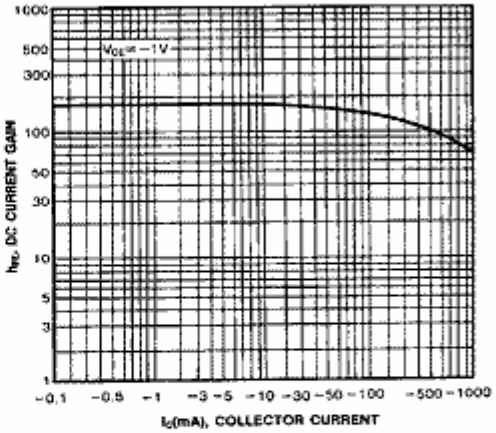
Typical Characteristics

SS8550

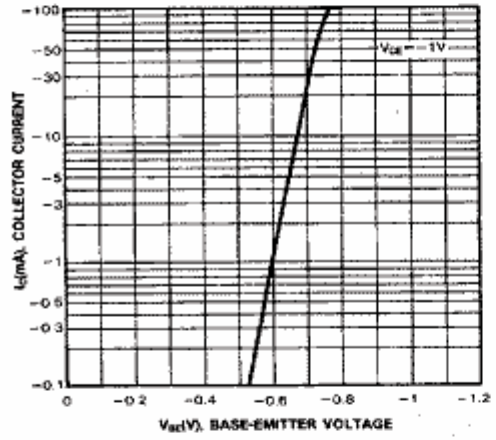
STATIC CHARACTERISTIC



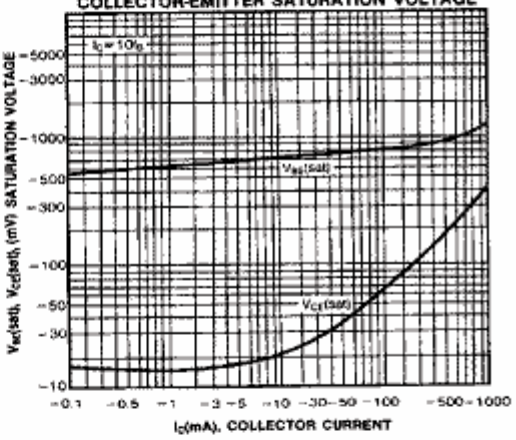
DC CURRENT GAIN



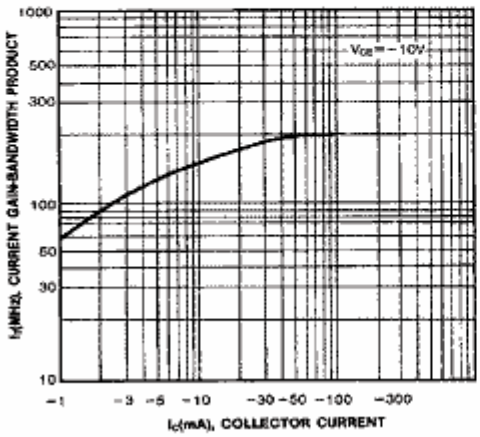
BASE-EMITTER ON VOLTAGE



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR OUTPUT CAPACITANCE