DONGGUAN ZHONGGUI ELECTRONICS CO., LTD

TO-92 Plastic-Encapsulate Transistors

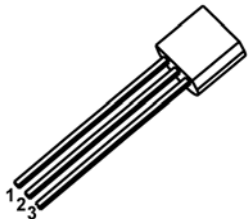
2SA950 TRANSISTOR (PNP)

TO-92

1.EMITTER

2. COLLECTOR

3. BASE



FEATURES

- 1W Output Applications
- Complementary to 2SC2120

MAXIMUM RATINGS (T_a=25 ℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.8	A
P_C	Collector Power Dissipation	0.6	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55 to +150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -0.1mA , I_E=0	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -10mA , I_B=0	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -0.1mA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}= -35V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V, I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-100mA	100		320	
	$h_{FE(2)}$	V_{CE}=-1V, I_C= -700mA	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= -500mA, I_B= -20mA			-0.7	V
Emitter-base voltage	V_{BE}	V_{CE}=-1V, I_C=-10mA	-0.5		-0.8	V
Collector Output Capacitance	C_{ob}	VCB=-10V,IE=0 f=1MHz		19		pF
Transition frequency	f_T	V_{CE}=-5V,I_C=-10mA		120		MHz

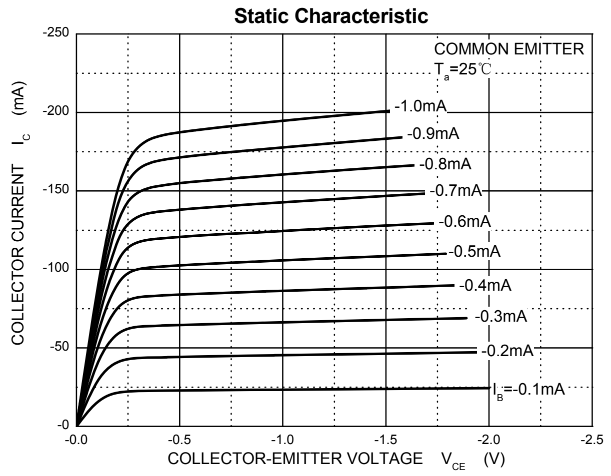
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320

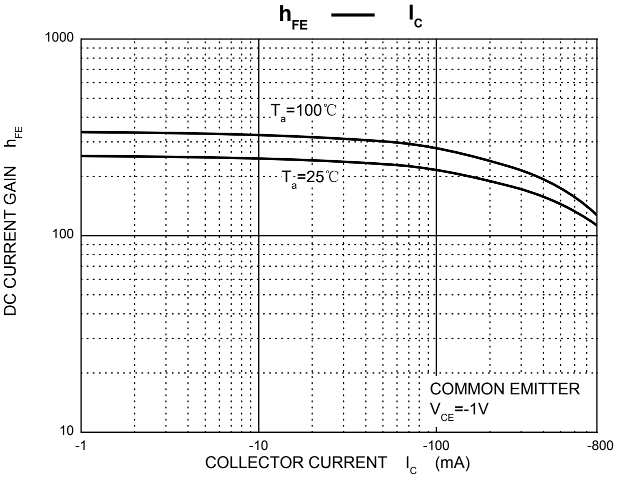
B,Nov,2011

Typical Characterisitics

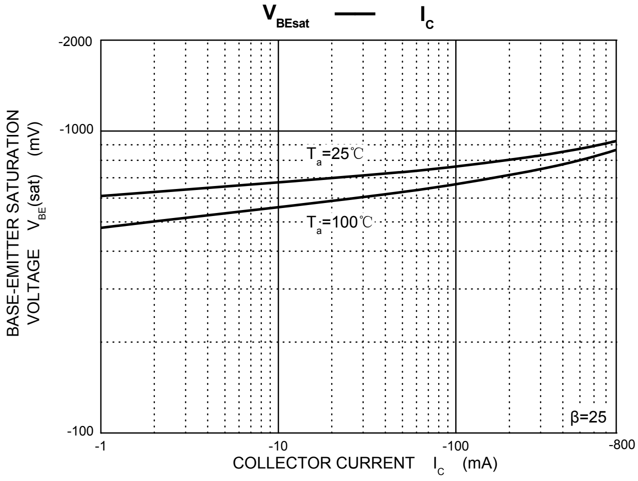
2SA950



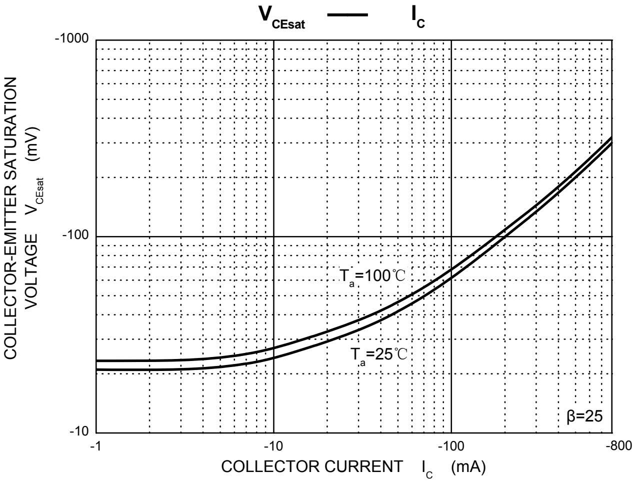
Static Characteristic



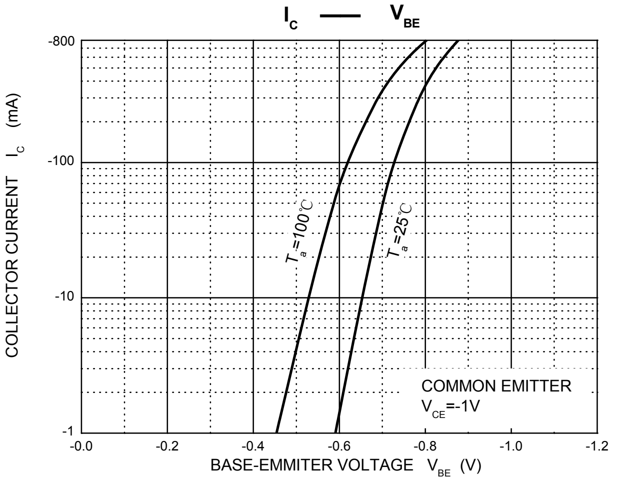
h_{FE} — I_C



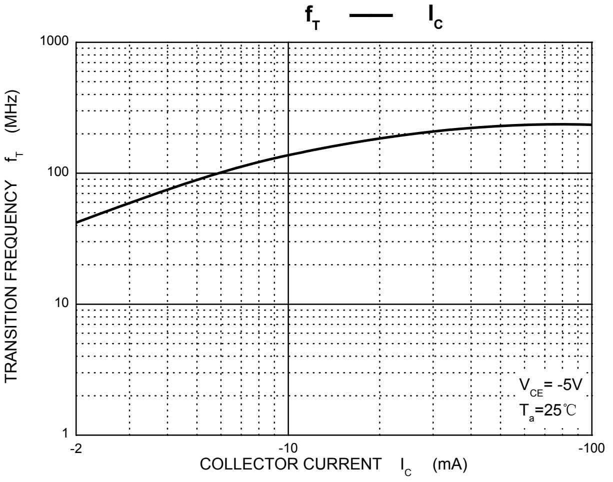
V_{BEsat} — I_C



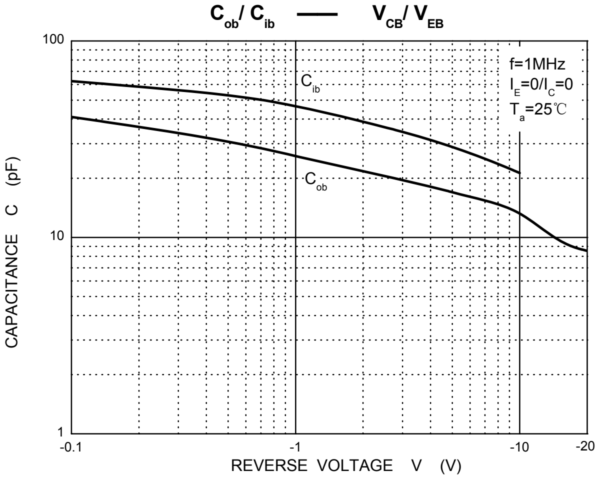
V_{CEsat} — I_C



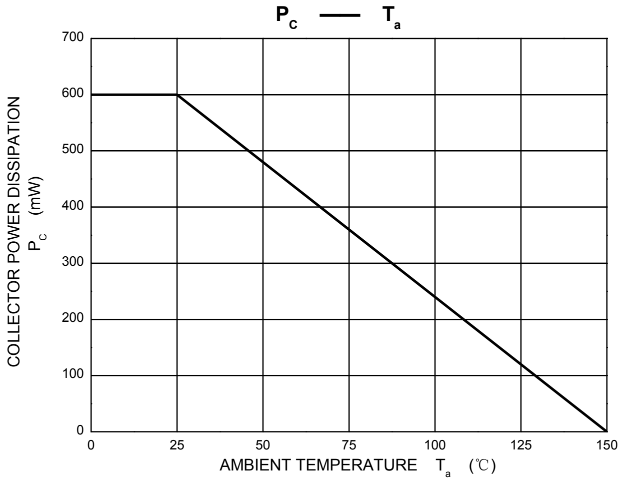
I_C — V_{BE}



f_T — I_C



C_{ob}/ C_{ib} — V_{CB}/ V_{EB}



P_C — T_a

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