

TO-92S Plastic-Encapsulate Transistors

2SA1267 TRANSISTOR (PNP)

FEATURES

- High h_{FE}
- Excellent h_{FE} linearing

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector- Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.15	A
P_C	Collector Power Dissipation	0.4	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

TO-92S

1. EMITTER
2. COLLECTOR
3. BASE



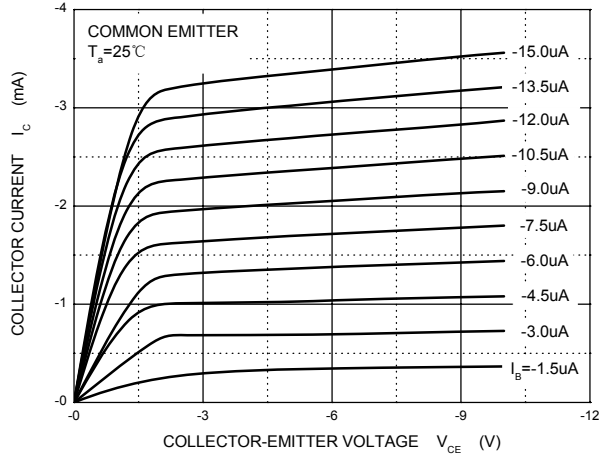
ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\ \mu\text{A}, I_E=0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-50			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}	$V_{CB}=-50\ \text{V}, I_E=0$			-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}	$V_{CE}=-6\ \text{V}, I_C=-2\text{mA}$	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$			-0.25	V
Transition frequency	f_T	$V_{CE}=-10\ \text{V}, I_C=-1\text{mA}, f=30\text{MHz}$	80			MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\ \text{V}, I_E=0, f=1\text{kHz}$			3.5	pF
Noise figure	NF	$V_{CE}=-6\text{V}, I_C=-0.1\text{mA}, f=1\text{kHz}, R_g=10\ \text{k}\Omega$			10	dB

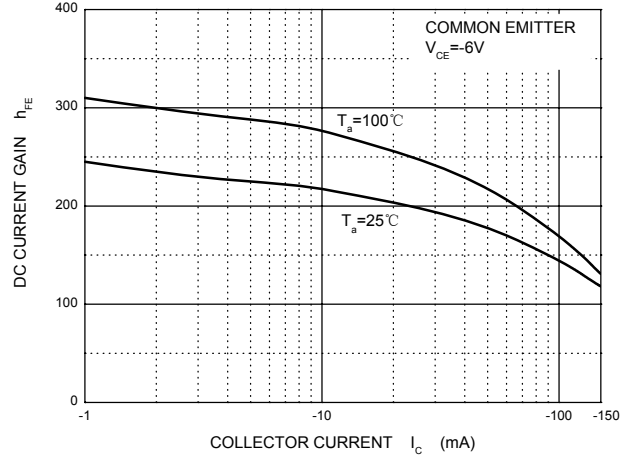
CLASSIFICATION OF h_{FE}

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	300-700

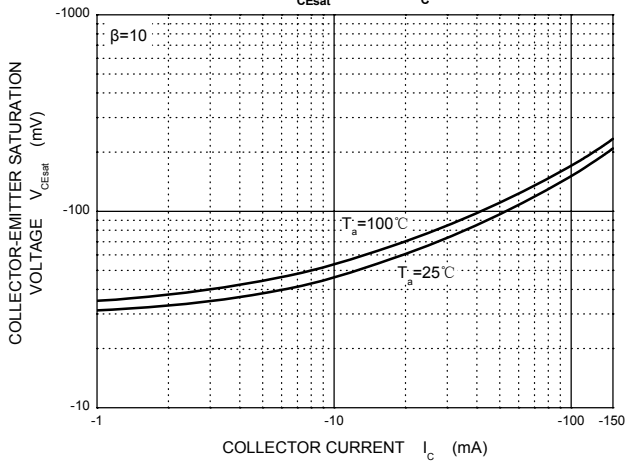
Static Characteristic



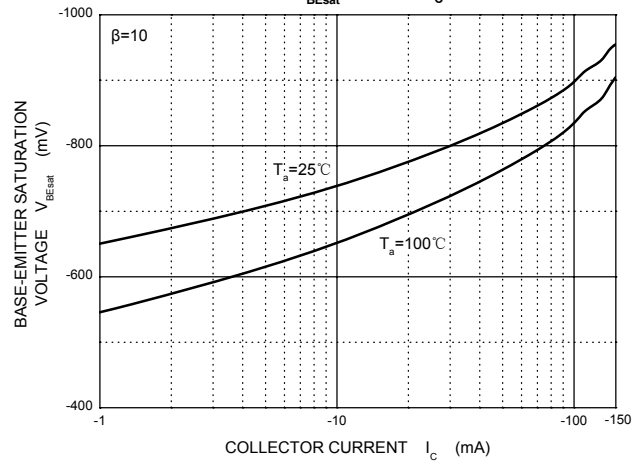
h_{FE} — I_c



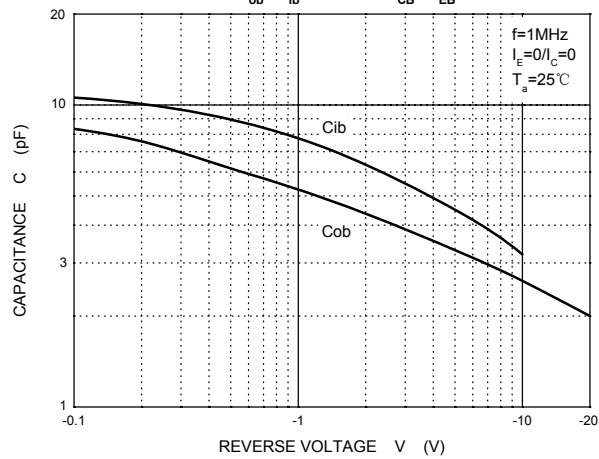
V_{CEsat} — I_c



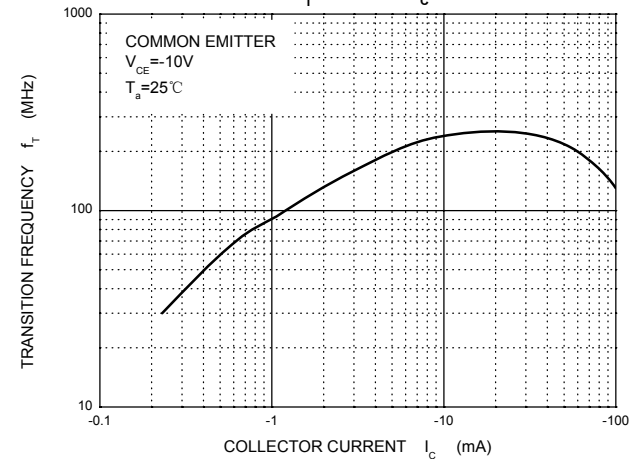
V_{BEsat} — I_c



C_{ob}/C_{ib} — V_{CB}/V_{EB}



f_T — I_c



P_c — T_a

