2SA1162 TRANSISTOR (**PNP**)

FEATURES

- Low noise
- Complementary to 2SC2712
- Small Package

1.BASE

2.COLLECTOR

3.EMITTER

SOT-23-3

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

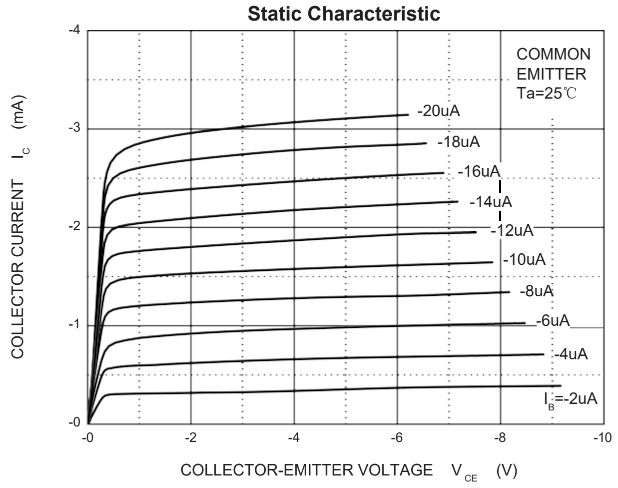
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-150	mA
P_C	Collector Power Dissipation	150	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	833	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55～+150	℃

ELECTRICAL CHARACTERISTICS (T_a= 25℃ unless otherwise specified)

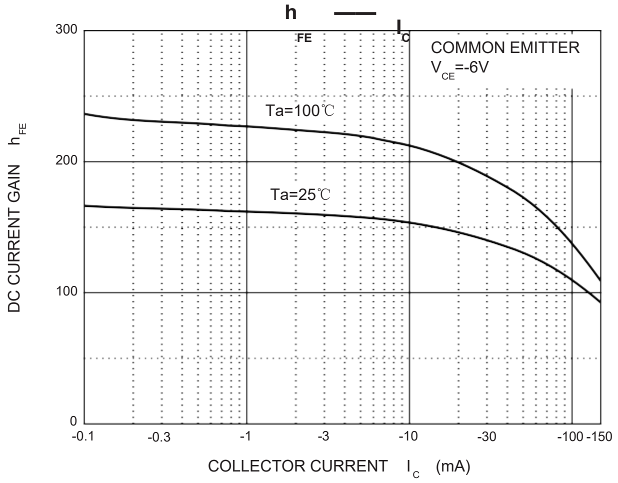
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-50V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-6V,I_C=-2mA	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B=-10mA			-0.3	V
Transition frequency	f_T	V_{CE}=-10V,I_C=-1mA	80			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz			7	pF
Noise figure	NF	V_{CE}=-6V,I_c=0.1mA, f=1KHz,Rg=10KΩ			10	dB

CLASSIFICATION OF h_{FE}

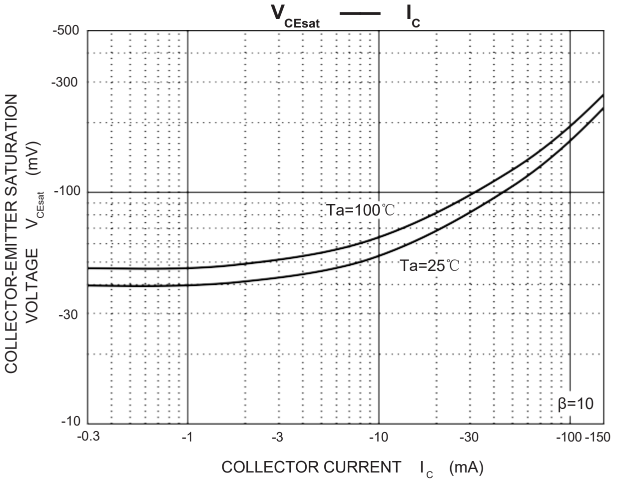
Rank	O	Y	GR(G)
Range	70-140	120-240	200-400



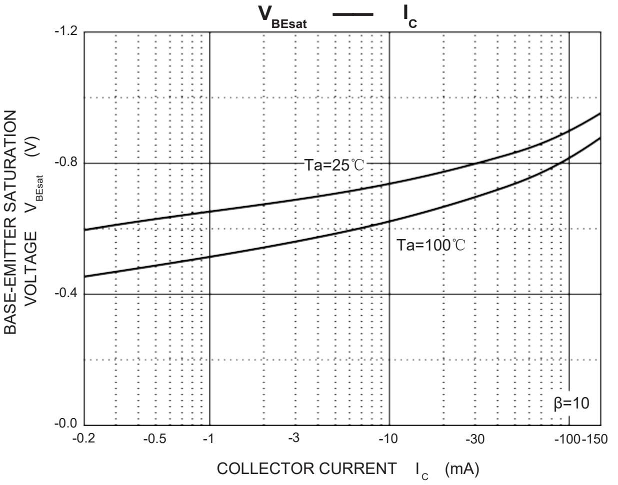
Static Characteristic



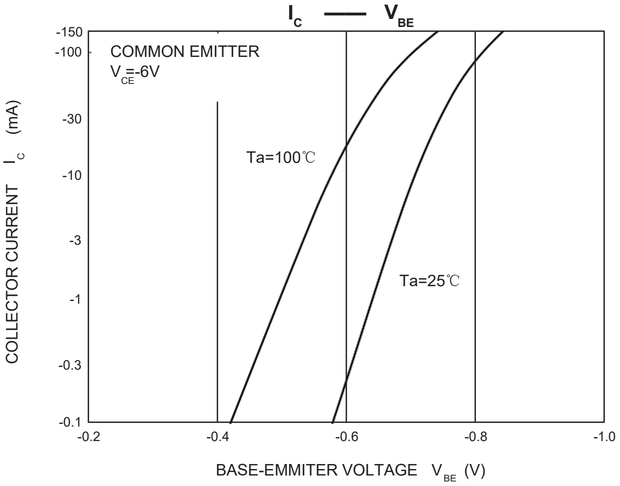
h_{FE} — I_C



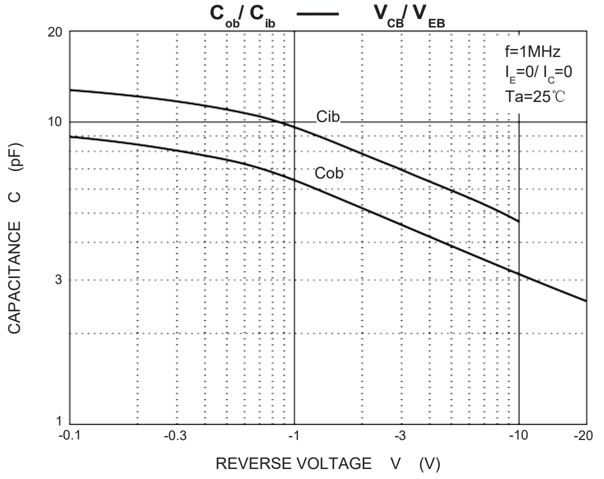
V_{CEsat} — I_C



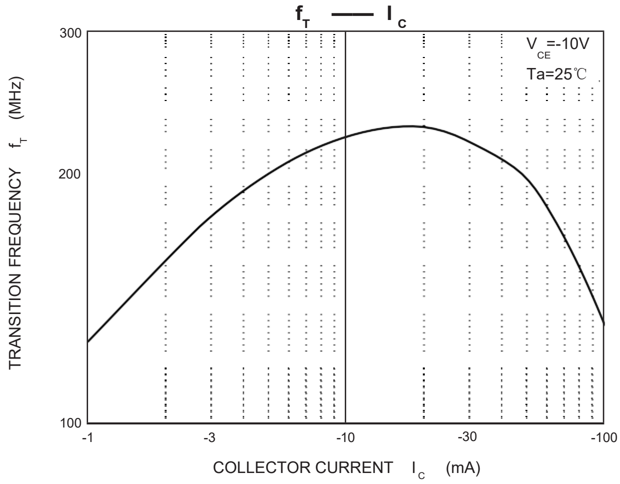
V_{BEsat} — I_C



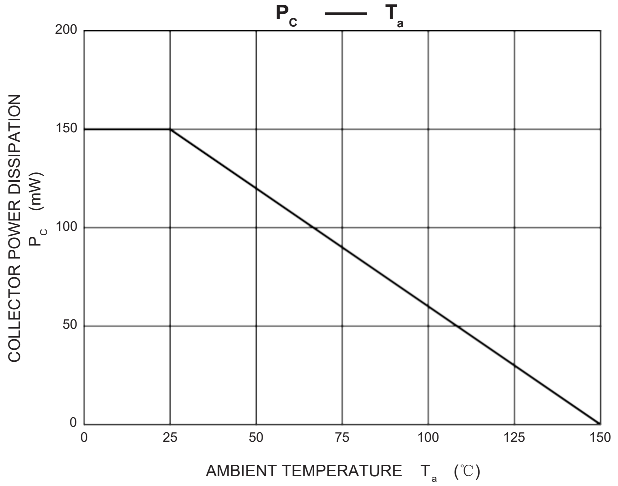
I_C — V_{BE}



C_{ob}/ C_{ib} — V_{CB}/ V_{EB}



f_T — I_C



P_C — T_a