2SA1625 TRANSISTOR (PNP)

TO-92

1.EMITTER
2.COLLECTOR
3.BASE

FEATURES

- High Voltage
- High Speed Switching
- Low Collector Saturation Voltage

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SA1625	TO-92	Bulk	1000pcs/Bag
2SA1625-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-400	V
V_{CEO}	Collector-Emitter Voltage	-400	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current -Continuous	-0.5	A
P_D	Collector Power Dissipation	750	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	166	℃ /W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

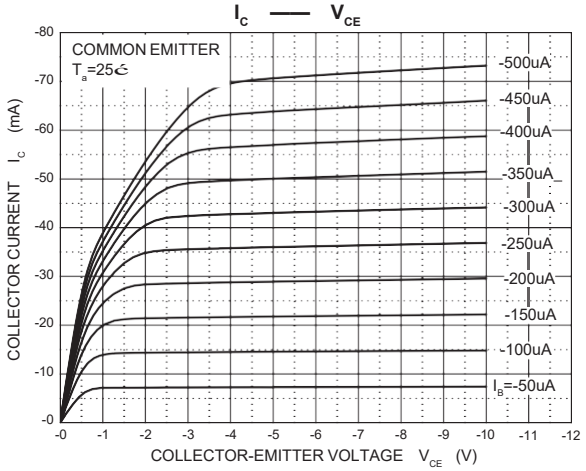
T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -0.1mA,I_E=0	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-0.1mA,I_C=0	-7			V
Collector cut-off current	I_{CBO}	V_{CB}=-400V,I_E=0			-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-10	μA
DC current gain	h_{FE}	V_{CE}=-5V, I_C=-50mA	40		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B=-10mA			-0.5	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$	I_C=-100mA,I_B=-10mA			-1.2	V
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz			20	pF
Transition frequency	f_T	V_{CE}=-10V,I_C=-10mA	20			MHz

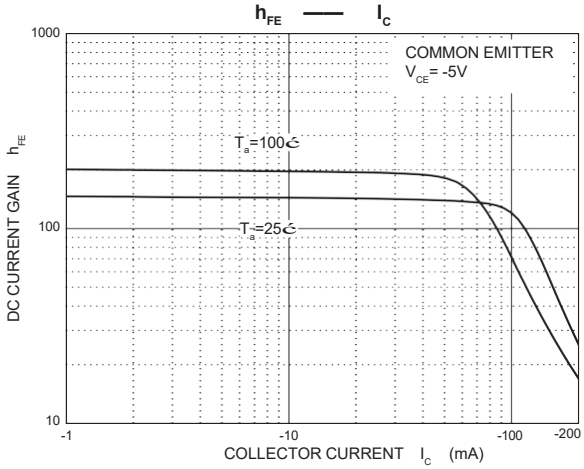
CLASSIFICATION OF h_{FE}

RANK	M	L	K
RANGE	40-80	60-120	100-200

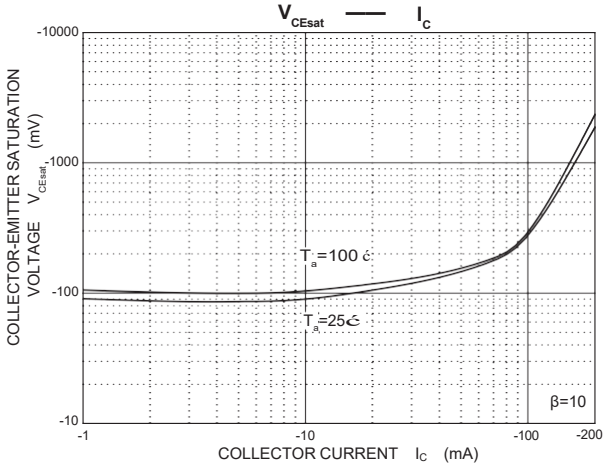
I_C —— V_{CE}



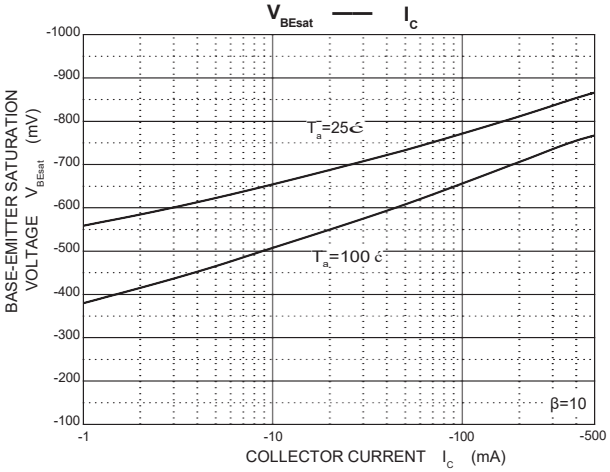
h_{FE} —— I_C



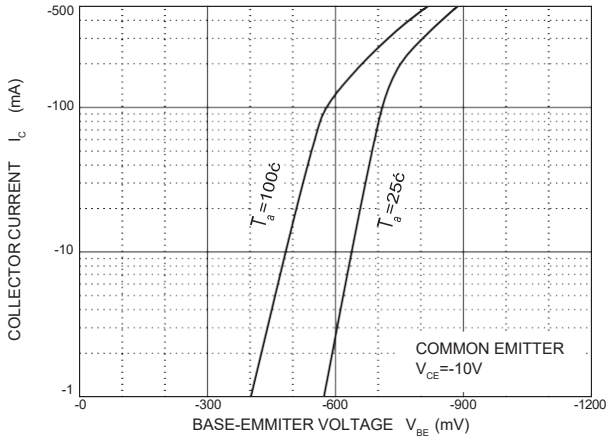
V_{CEsat} —— I_C



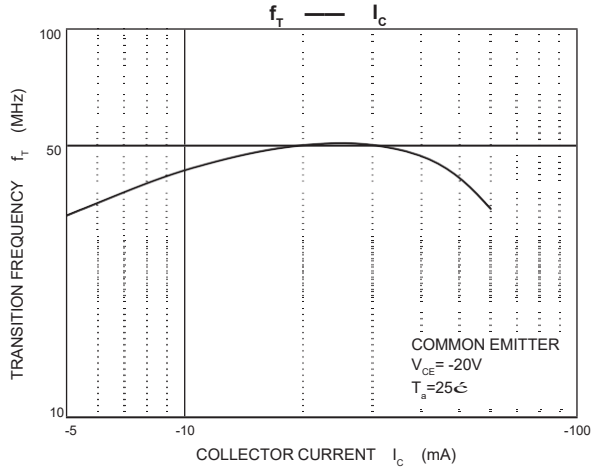
V_{BEsat} —— I_C



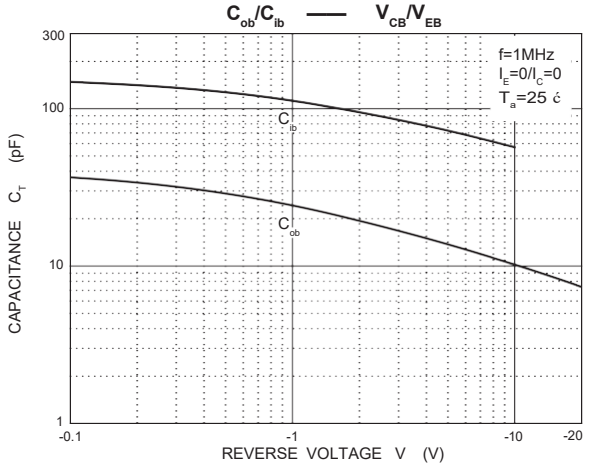
I_C —— V_{BE}



f_T —— I_C



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



P_C —— T_a