2SA1036 TRANSISTOR (PNP)

1.BASE

2.COLLECTOR

3.EMITTER

SOT-23-3

FEATURES

- **Large I_C. $_{ICMax}$.= -500 mA**
- **Low $V_{CE(sat)}$. Ideal for low-voltage operation.**

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Power Dissipation	200	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

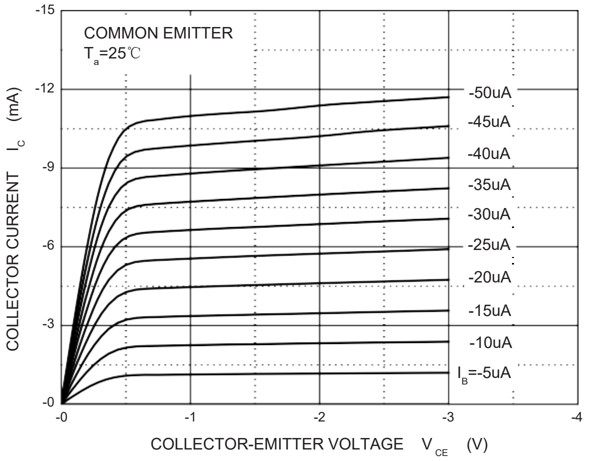
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V,I_E=0			-1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V,I_C=0			-1	μA
DC current gain	h_{FE}	V_{CE}=-3V,I_C=-10mA	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B=-10mA			-0.4	V
Transition frequency	f_T	V_{CE}=-5V,I_C=-20mA,f=100MHz		200		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz		7		pF

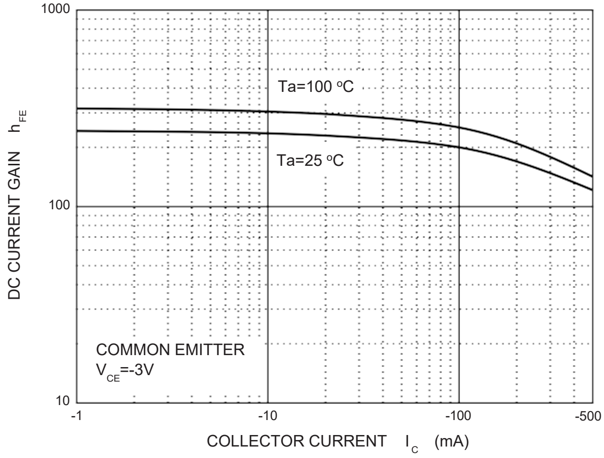
CLASSIFIC ATION OF h_{FE}

Rank	P	Q	R
Range	82 - 180	120 - 270	180 - 390

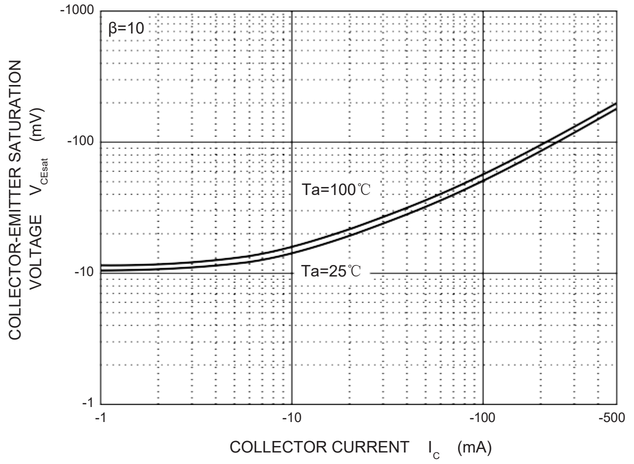
Static Characteristic



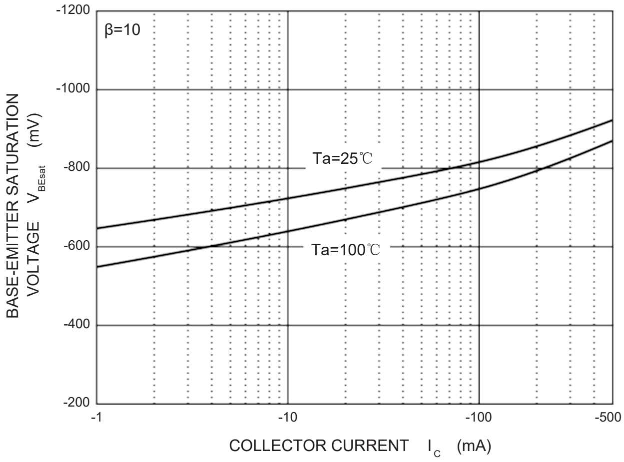
h_{FE} — I_C



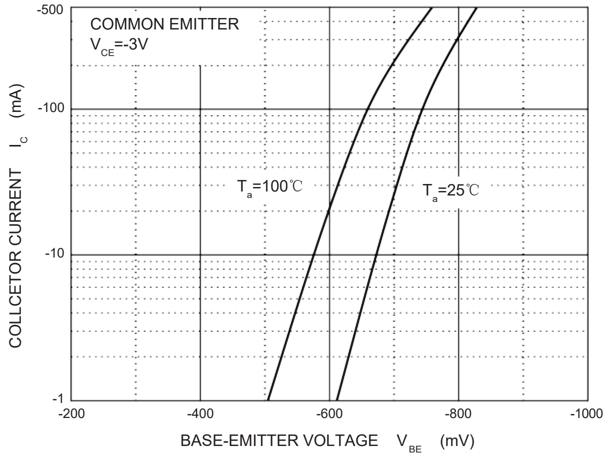
V_{CEsat} — I_C



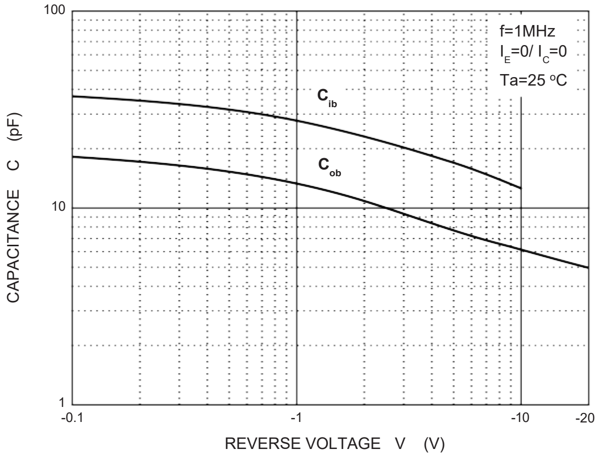
V_{BEsat} — I_C



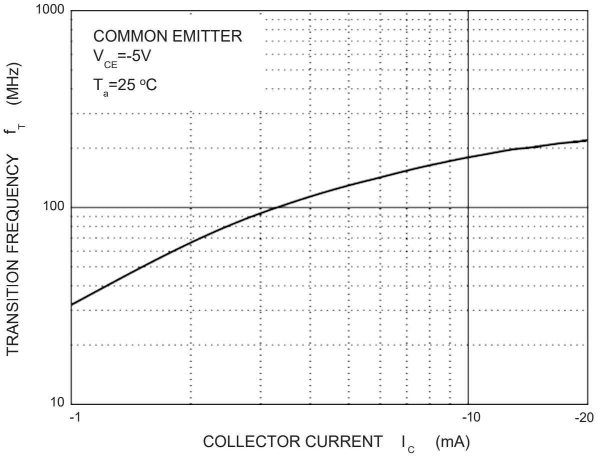
I_C — V_{BE}



C_{ob}/ C_{ib} — V_{CB}/ V_{EB}



f_T — I_C



Pc — Ta