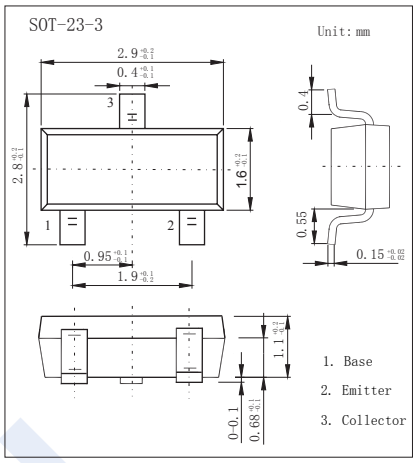
PNP Transistors

2SA1036-HF (2SA1036K-HF)



Features

- Large I_C. $I_{CMax.}$ = -500mA
- Low $V_{CE(sat)}$. Ideal for low-voltage operation.
- Pb−Free Package May be Available. The G−Suffix Denotes a Pb−Free Lead Finish

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-40	V
Collector-emitter voltage	V_{CEO}	-32	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current *	I_C	-0.5	A
Collector power dissipation	P_C	0.2	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* P_C max. must not be exceeded.

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-40			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, I_B=0	-32			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -20 V , I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}= -4V , I_C=0			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-1mA			-0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-100mA, I_B=-1mA			-1.2	
DC current gain	h_{FE}	V_{CE}= -3V, I_C= -10mA	82		390	
Output capacitance	C_{ob}	V_{CB}= -10V, I_E= 0,f=1MHz		7		pF
Transition frequency	f_T	V_{CE}= -5V, I_E=- 20mA,f=100MHz		200		MHz

h_{FE} Classification

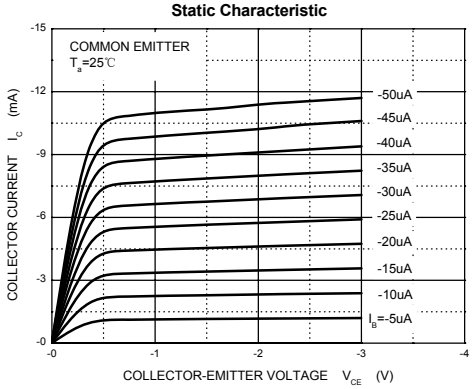
Type	2SA1036/K-P-HF	2SA1036/K-Q-HF	2SA1036/K-R-HF
Range	82-180	120-270	180-390
Marking	HP F	HQ F	HR F

PNP Transistors

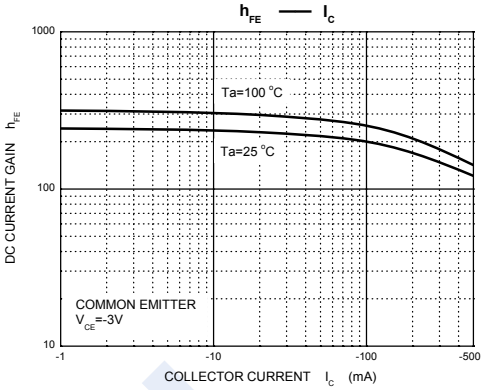
2SA1036-HF (2SA1036K-HF)

■ Typical Characterisitics

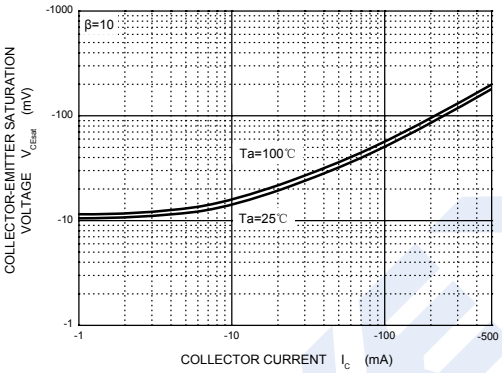
Static Characteristic



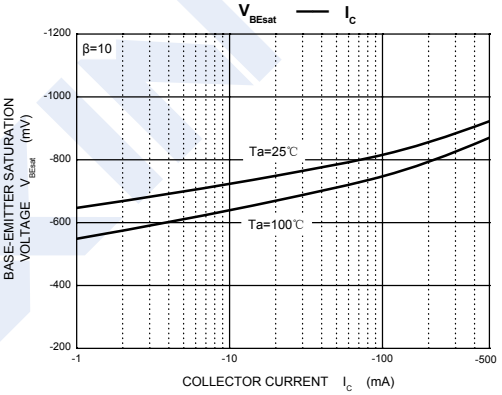
h_{FE} — I_C



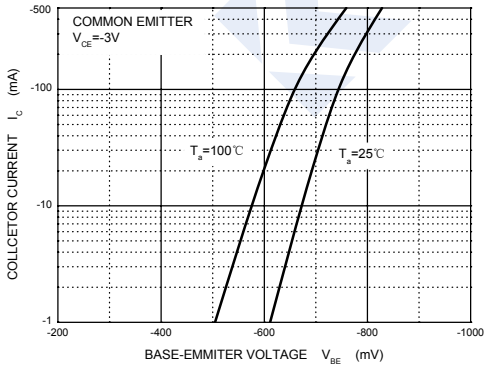
V_{CEsat} — I_C



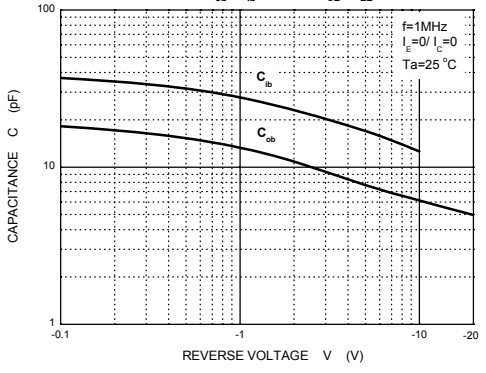
V_{BEsat} — I_C



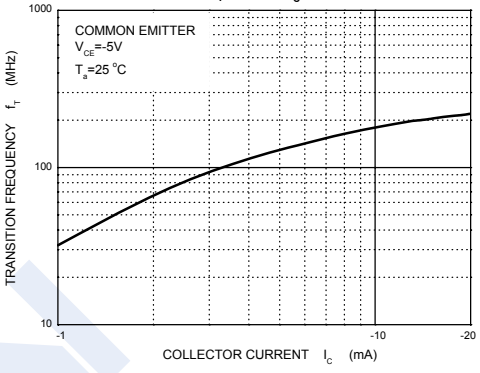
I_C — V_{BE}



C_{ob} / C_{ib} — V_{CB} / V_{EB}



f_T — I_C



Pc — Ta