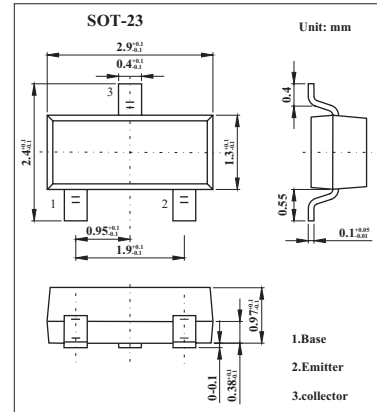


NPN Transistors

KST9014

■ Features

- Excellent hFE linearity
- Collector Current :Ic=0.1A



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	50	V
Collector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current -Continuous	I _c	0.1	A
Collector Power Dissipation	P _c	0.2	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to 150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{CB0}	I _c =100μA, I _E =0	50			V
Collector-emitter breakdown voltage	V _{CEO}	I _c =1mA, I _B =0	45			V
Emitter-base Breakdown voltage	V _{EBO}	I _E =100 μ A, I _c =0	5			V
Collector cutoff current	I _{cBO}	V _{CB} =50V, I _E =0			0.1	μ A
Emitter cutoff current	I _{EBO}	V _{EB} =5V, I _c =0			0.1	μ A
DC current gain	h _{FE}	V _{CE} =5V, I _c =1mA	200		1000	
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	V
Transition frequency	f _T	V _{CE} =5V, I _c =10mA, f=30MHZ	150			MHz

■ hFE Classification

Marking	J6	
Rank	L	H
hFE	200 to 450	450 to 1000

KST9014

■ Typical Characteristics

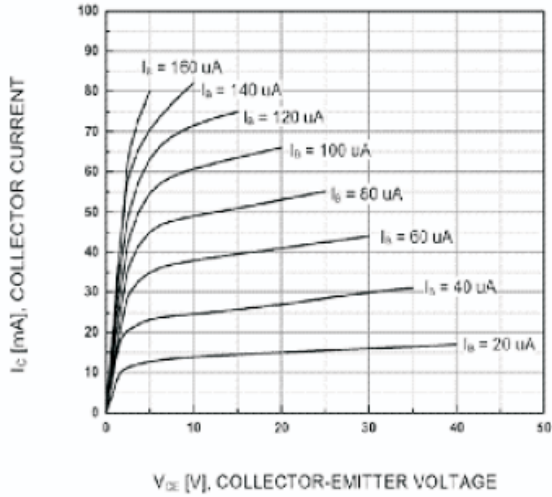


Fig.1 Static Characteristic

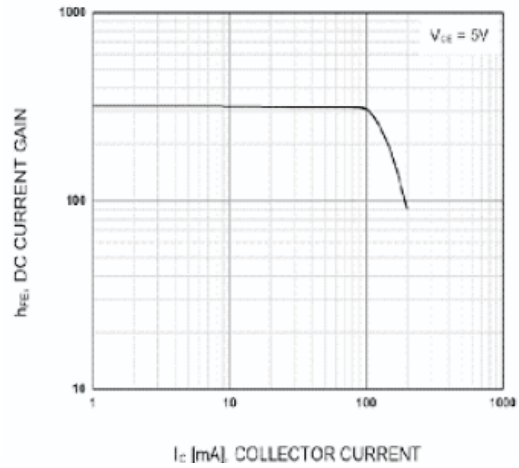


Fig.2 DC Current Gain

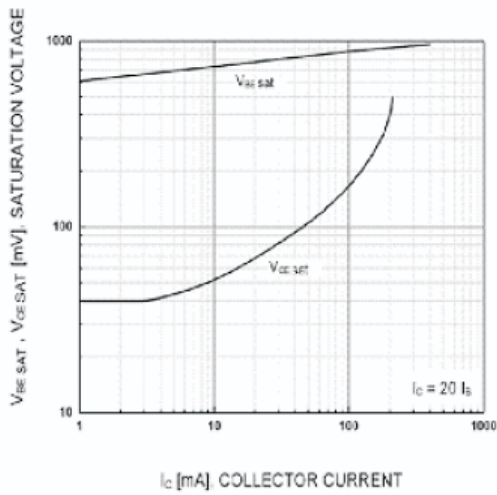


Fig.3 Base-Emitter Saturation Voltage
Collector- Emitter Saturation Voltage

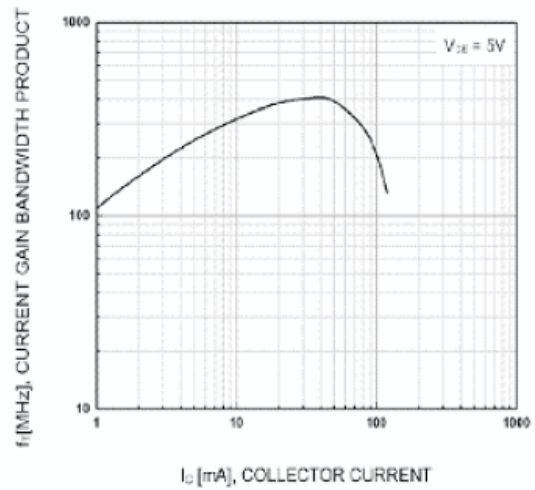


Fig. 4 Current Gain Bandwidth Product