

SMD Type

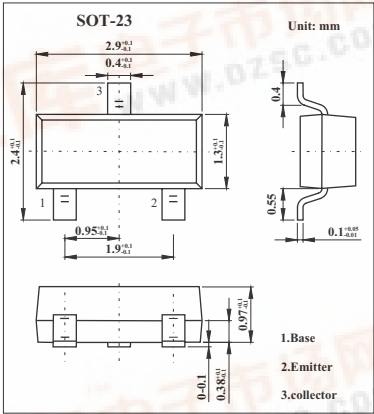
Transistors

NPN Transistors

KST8050

■ Features

- Collector Current: Ic=1.5A



■ Absolute Maximum Ratings Ta = 25℃

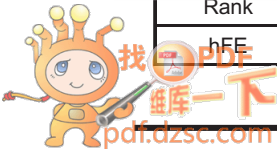
Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	40	V
Collector-Emitter Voltage	V _{CE0}	25	V
Emitter-Base Voltage	V _{EB0}	5	V
Collector Current -Continuous	I _c	1.5	A
Collector Dissipation	P _c	0.3	W
Junction Temperature	T _j	150	℃
Storage Temperature	T _{stg}	-55 to 150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{CB0}	I _c = 100 μA , I _E = 0	40			V
Collector-emitter breakdown voltage	V _{CE0}	I _c = 1mA , I _B = 0	25			V
Emitter-base Breakdown voltage	V _{EB0}	I _E = 100 μA , I _c = 0	5			V
Collector-base cut-off current	I _{CB0}	V _{CB} = 40 V , I _E = 0			0.1	μ A
Collector-emitter cut-off current	I _{CE0}	V _{CE} = 20 V , I _B = 0			0.1	μ A
Emitter-base cut-off current	I _{EB0}	V _{EB} = 5 V , I _c = 0			0.1	μ A
DC current gain	h _{FE}	V _{CE} = 1 V , I _c = 100 mA	120		400	
		V _{CE} = 1 V , I _c = 800 mA	40			
Collector-emitter saturation voltage	V _{CE(sat)}	I _c = 800 mA , I _B = 80 mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _c = 800 mA , I _B = 80 mA			1.2	V
Transition frequency	f _T	V _{CE} = 10 V , I _c = 50 mA , f = 30 MHz	100			MHz

■ hFE Classification

Marking	Y1		
Rank	L	H	J
hFE	120~200	200~350	300~400



KST8050

■ Typical Characteristics

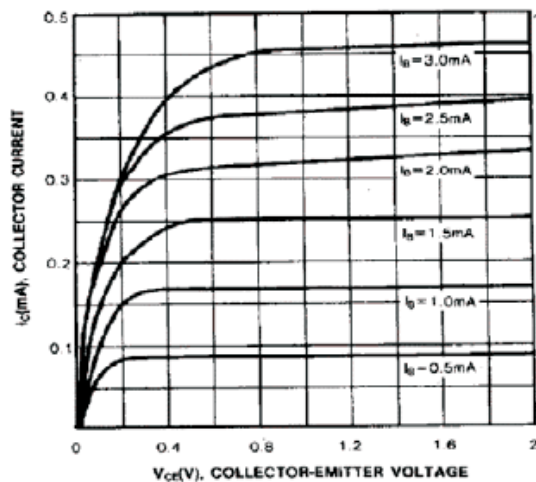


Fig.1 Static Characteristic

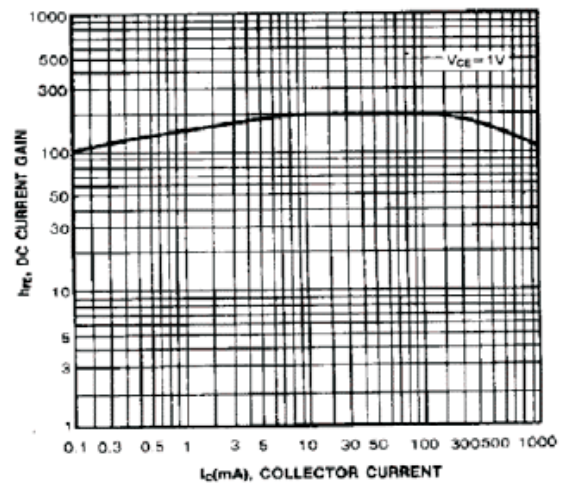


Fig.2 DC Current Gain

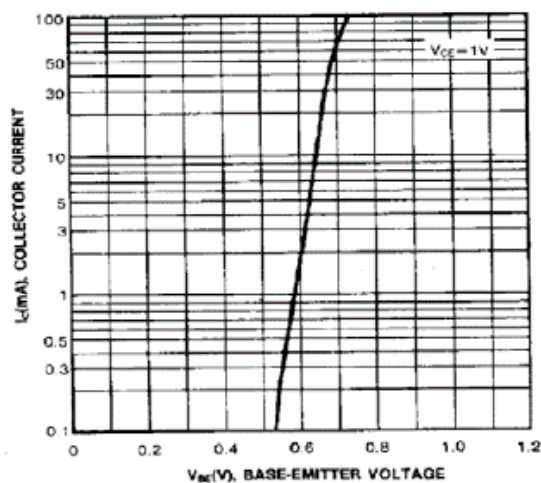


Fig.3 Base Emitter ON Voltage

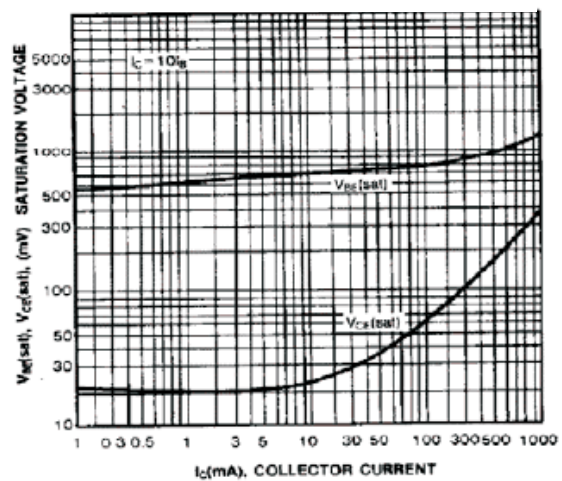
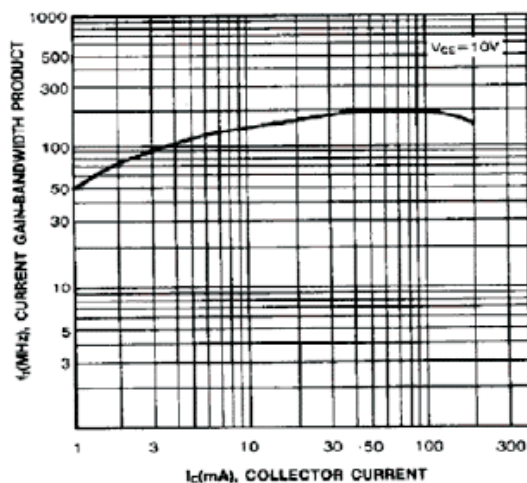
Fig.4 Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage

Fig.5 Current Gain Bandwidth Product

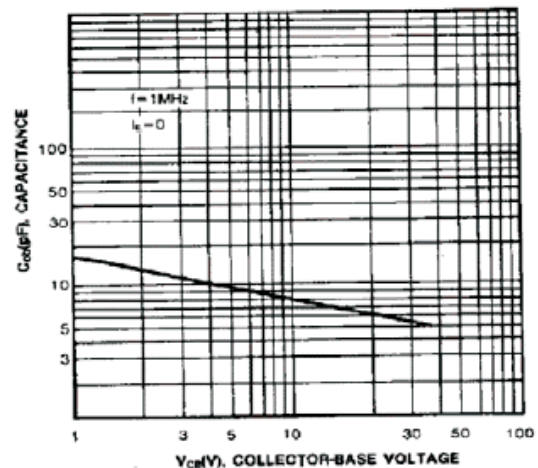


Fig.6 Collector Output Capacitance