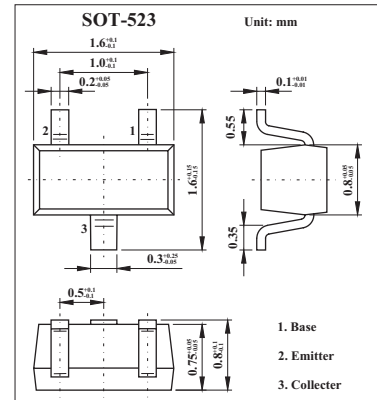


2SC4617

■ Features

- Low Cob : Cob=2.0pF (Typ.)
- NPN silicon transistor



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	60	V
Collector-emitter voltage	V _{CEO}	50	V
Emitter-base voltage	V _{EB0}	7	V
Collector current	I _c	0.15	A
Collector power dissipation	P _c	0.15	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 =50μA	60			V
Collector-emitter breakdown voltage	V _{CEO}	I _c =1mA	50			V
Emitter-base breakdown voltage	V _{EB0}	I _E =50μA	7			V
Collector cutoff current	I _{cB0}	V _{CB} =60V			0.1	μ A
Emitter cutoff current	I _{EB0}	V _{EB} =7V			0.1	μ A
DC current gain	h _{FE}	V _{CE} =6V, I _c =1mA	120		560	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c /I _b =50mA/5mA			0.4	V
Output capacitance	C _{ob}	V _{CE} =12V, I _E =0A, f=1MHz		2	3.5	pF
Transition frequency	f _T	V _{CE} =12V, I _E =-2mA, f=100MHz		180		MHz

■ hFE Classification

Marking	BQ	BR	BS
Rank	Q	R	S
hFE	120~270	180~390	270~560

Typical Characteristics

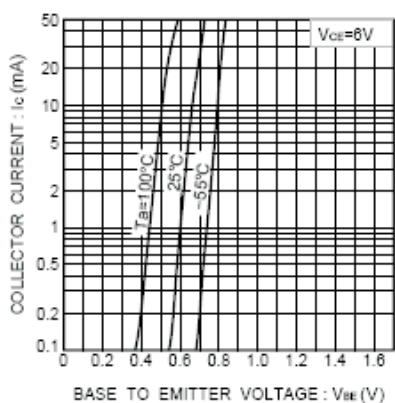


Fig.1 Grounded Emitter Propagation Characteristics

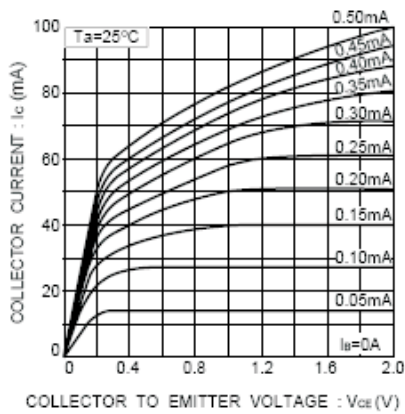


Fig.2 Grounded Emitter Output Characteristics

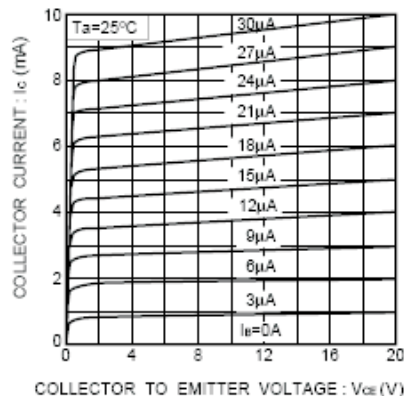


Fig.3 Grounded Emitter Output Characteristics

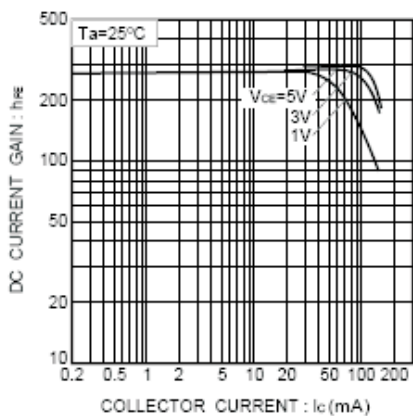


Fig.4 DC Current Gain vs. Collector Current

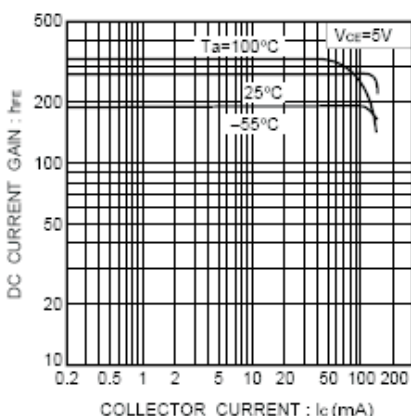


Fig.5 DC Current Gain vs. Collector Current

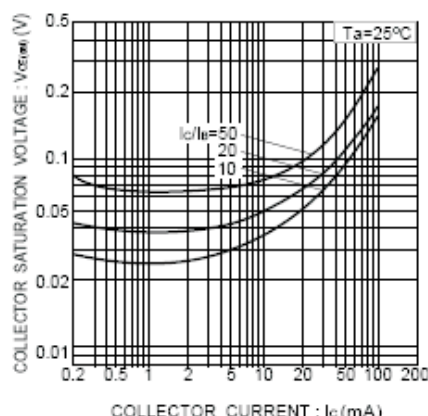


Fig.6 Collector Emitter Saturation Voltage vs. Collector Current

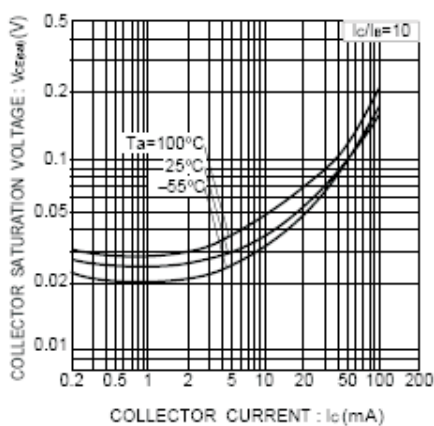


Fig.7 Collector Emitter Saturation Voltage vs. Collector Current

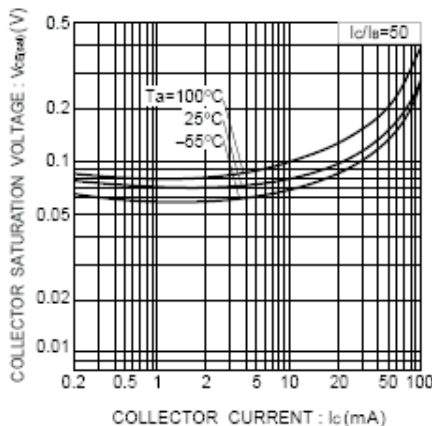


Fig.8 Collector Emitter Saturation Voltage vs. Collector Current

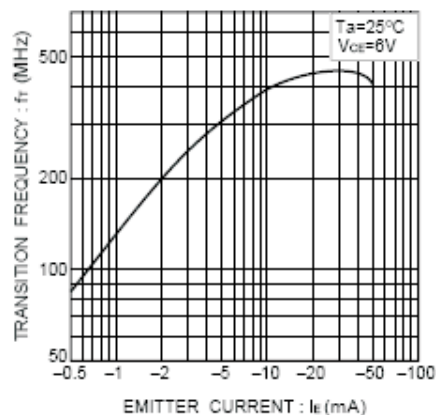


Fig.9 Gain Bandwidth Product vs. Emitter Current

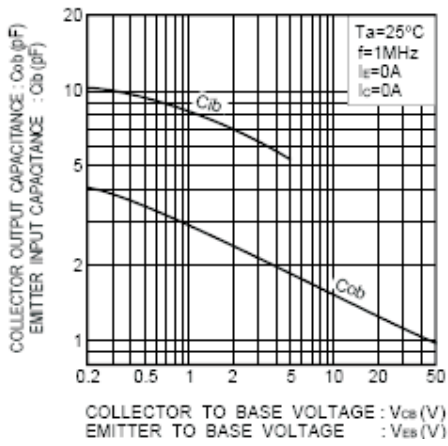


Fig.10 Collector Output Capacitance vs. Collector-Base Voltage
Emitter Input Capacitance vs. Emitter-Base Voltage

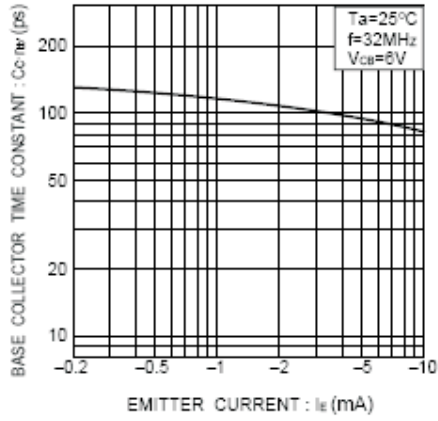


Fig.11 Base-Collector Time Constant vs. Emitter Current