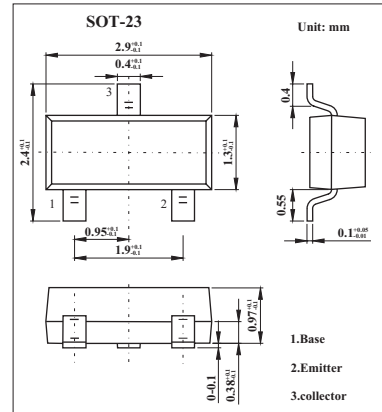


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Features

- Low Cob.Cob=2.0pF (Typ.)



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	0.2	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 =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	μA
Emitter cutoff current	I _{EB0}	V _{EB} =7V			0.1	μA
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
Collector 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

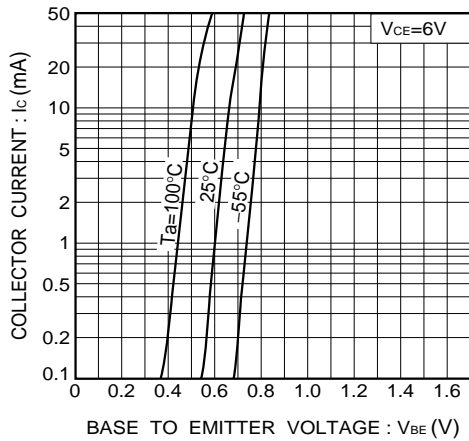


Fig.1 Grounded emitter propagation characteristics

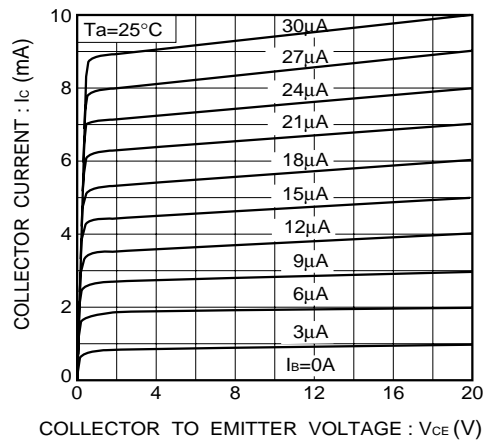


Fig.2 Grounded emitter output characteristics

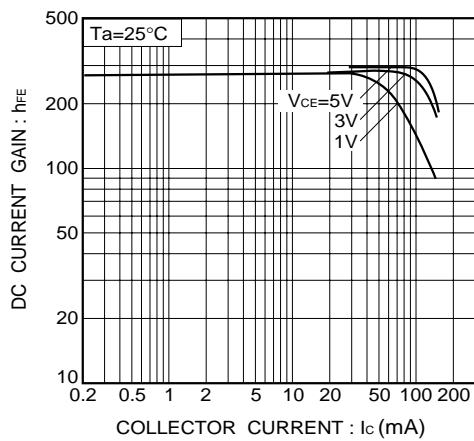


Fig.3 DC current gain vs. collector current

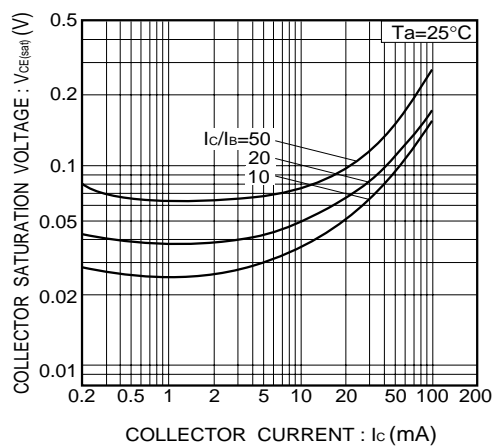


Fig.4 Collector-emitter saturation voltage vs. collector current

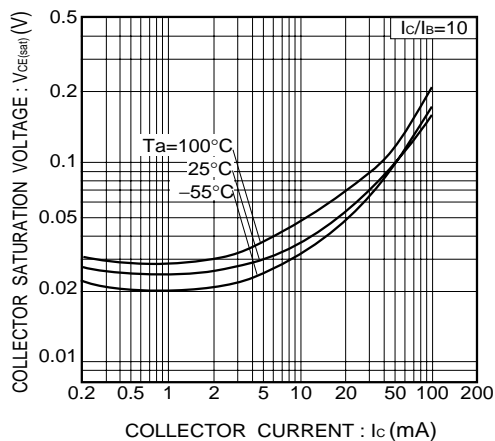


Fig.5 Collector-emitter saturation voltage vs. collector current

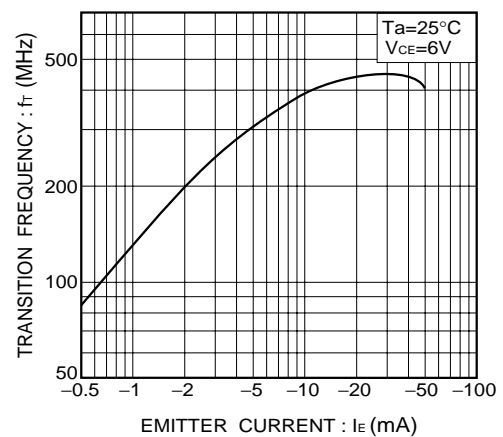


Fig.6 Gain bandwidth product vs. emitter current

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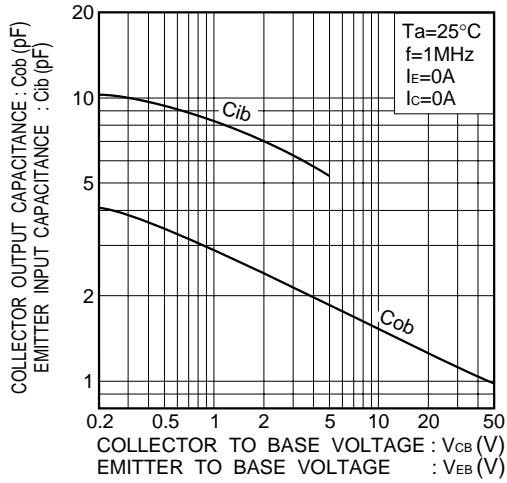


Fig.7 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

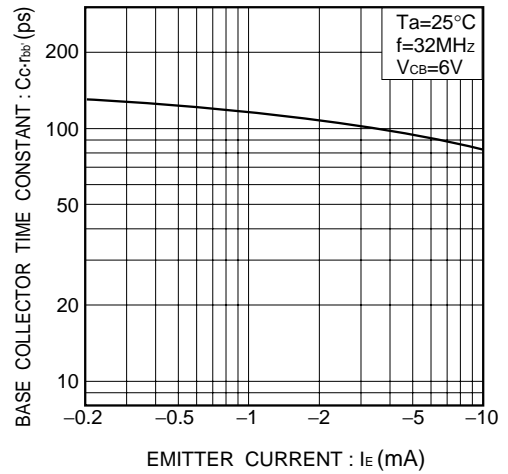


Fig.8 Base-collector time constant vs. emitter current