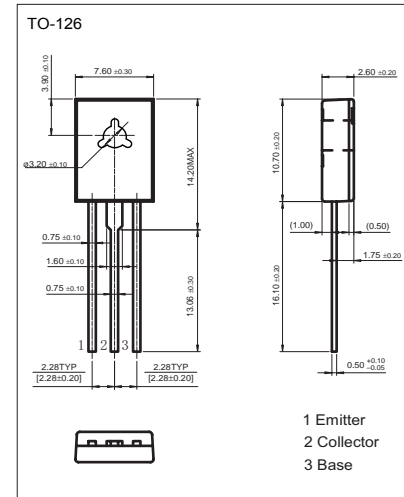


PNP Silicon Power Transistor 2SB772

Features

- High current output up to 3A
- Low saturation voltage
- Complement to 2SD882



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to base voltage	V _{CB0}	-40	V
Collector to emitter voltage	V _{CEO}	-30	V
Emitter to base voltage	V _{EBO}	-5	V
Collector current	I _C	-3	A
Collector Power dissipation (Ta=25°C)	P _C	1	W
Collector Power dissipation (Tc=25°C)	P _C	10	W
Junction temperature	T _j	150	°C
Storage temperature range	T _{stg}	-55 to +150	°C

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -100 μA, I _E = 0	-40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -10 mA, I _B = 0	-30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -100 μA, I _C = 0	-5			V
Collector cutoff current	I _{CBO}	V _{CB} = -40 V, I _E = 0			-1.0	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -5V, I _C = 0			-1.0	μA
DC current gain *	h _{FE}	V _{CE} = -2.0 V, I _C = -1.0A	60		400	
Collector saturation voltage *	V _{CE(sat)}	I _C = -2A, I _B = -0.2A			-0.5	V
Base saturation voltage *	V _{BE(sat)}	I _C = -2A, I _B = -0.2A			-1.5	V
Transition frequency	f _T	V _{CE} = -5.0 V, I _C = -0.1A, f=10MHz		80		MHz

* Pulsed: PW ≤ 350 μs, duty cycle ≤ 2%

hFE Classification

Rank	R	Q	P	E
hFE	60~120	100~200	160~320	200~400

2SB772

Typical Characteristics

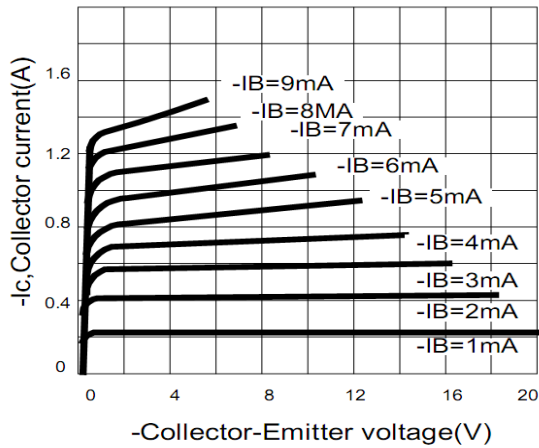


Fig.1 Static characteristics

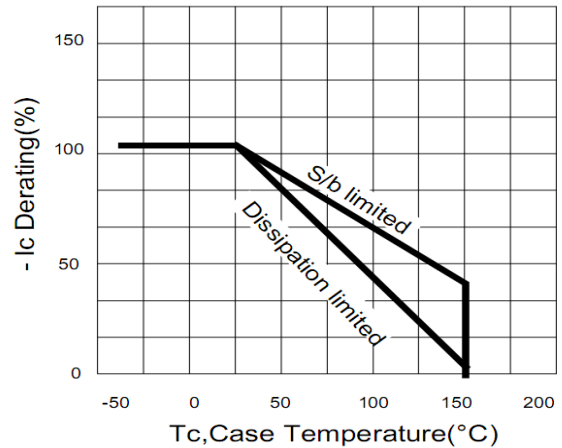


Fig.2 Derating curve of safe operating areas

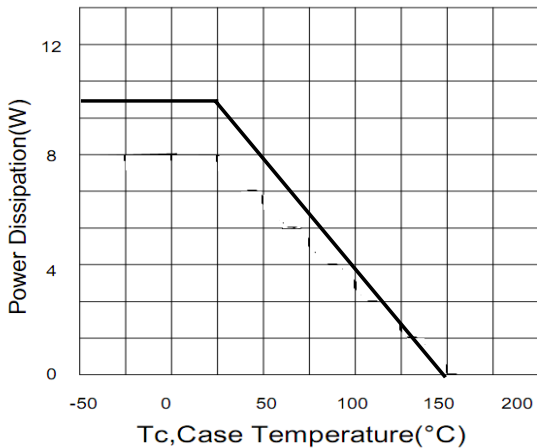


Fig.3 Power Derating

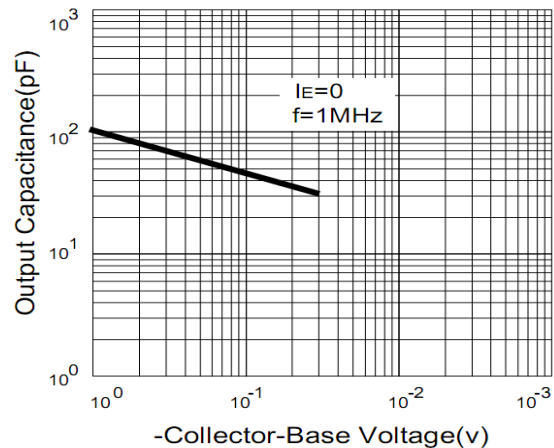


Fig.4 Collector Output capacitance

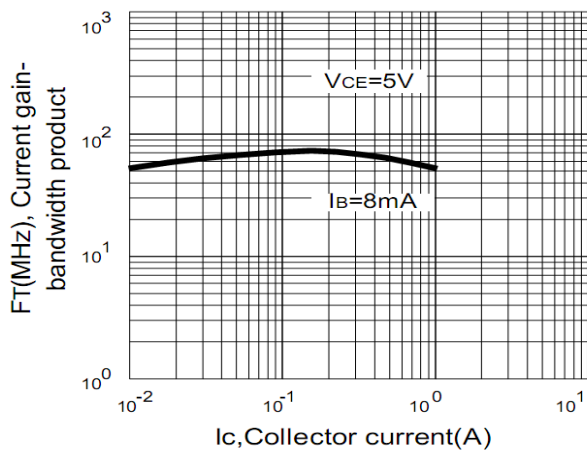


Fig.5 Current gain-bandwidth product

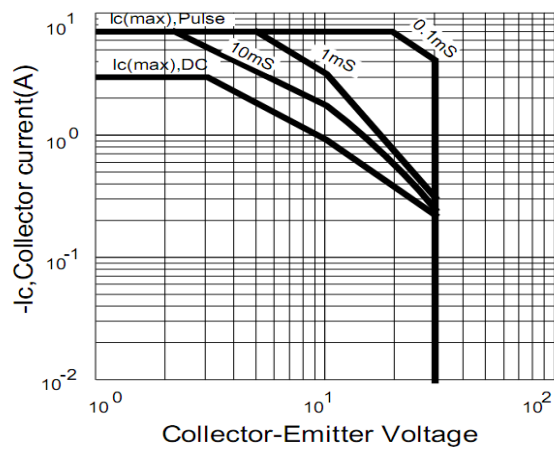


Fig.6 Safe operating area

2SB772

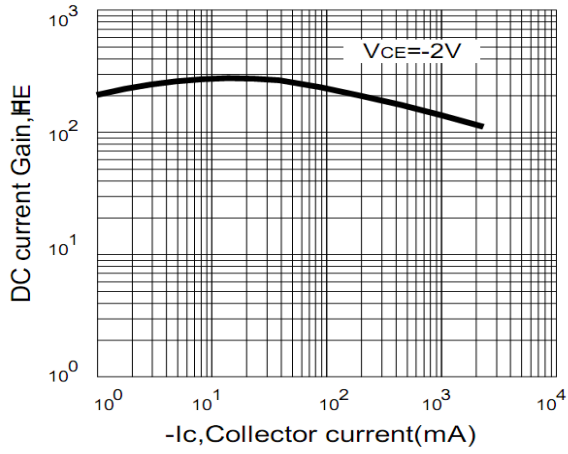


Fig.7 DC current gain

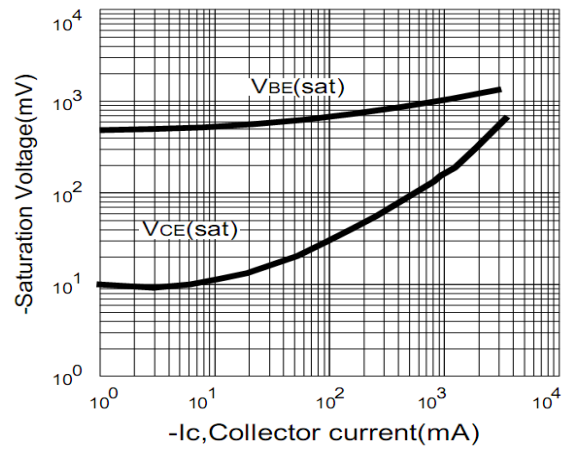


Fig.8 Saturation Voltage