2SB772

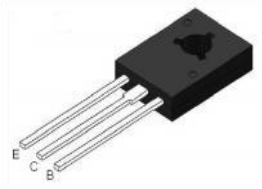
PNP Plastic-Encapsulate Transistors

1. Features

• The device is a PNP transistor manufactured by using planar Technology resulting in rugged highperformance devices.

• The complementary NPN type is 2SD882.

TO-126



2. Mechanical Data

- Case:Molded Plastic,TO-126 .
- Epoxy:UL 94V-0 rate flame retardant.
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking:marked on body.

3. Maximum Ratings and Electrical Characteristics

Electrical Characteristics Rating at 25℃ ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	-40	V
Collector-Emitter Voltage	BV_{CEO}	-30	V
Emitter-Base Voltage	BV_{EBO}	-5	V
Collector Current	I_C	-3	A
Collector Power Dissipation	P_C	1.25	W
Power Dissipation	T_j	150	℃
Storage Temperature	T_{stg}	-55～150	℃

4.Electrical Characteristics (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Conditions	Value			UNIT
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	I_C = -100μA，I_E = 0	-40			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C=-10mA,I_B=0	-30			V
Emitter-base breakdown voltage	BV_{EBO}	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V,I_E=0			-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-10	μA
DC current gain	$h_{FE}1$	V_{CE}=-2V,I_B=-20mA	50			
	$h_{FE}2$	V_{CE}=-2V,I_B=-1A	100		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A,I_B=-0.2A			-0.5	V
Base -emitter saturation voltage	$V_{BE(sat)}$	I_C=-2A,I_B=-0.2A			-2	V
Transition frequency	fT	V_{CE}=-5V,I_B=-0.1A	50			MHz

5.hFE Classification and Marking

Classification	Q	P	E
Range	100-200	160-320	200-400
Marking	2SB772Q	2SB772P	2SB772E

6. Rating And Characteristic Curves

Fig. 1 Static Characteristic

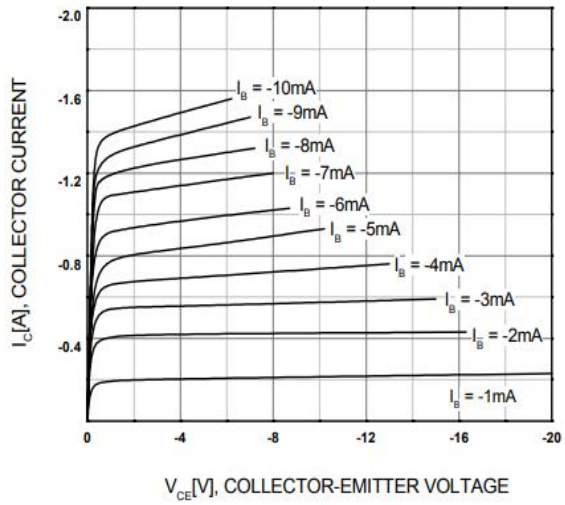


Fig. 2 DC current Gain

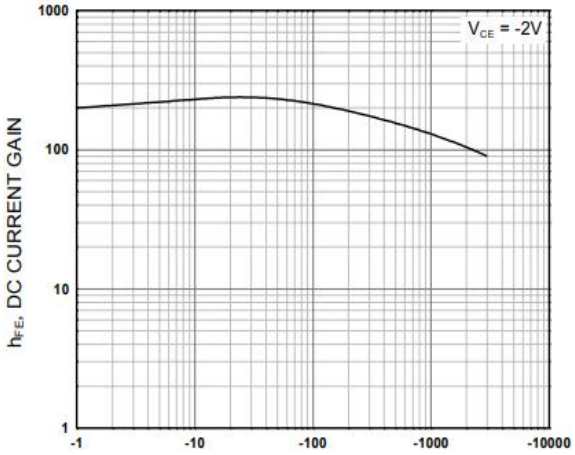


Fig. 3 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

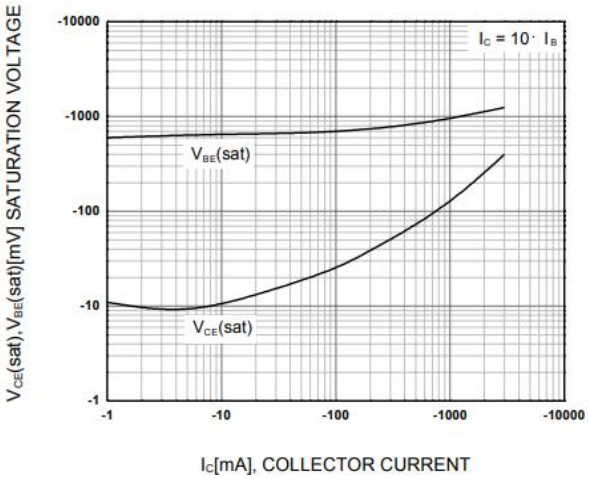


Fig.4 Collector Output Capacitance

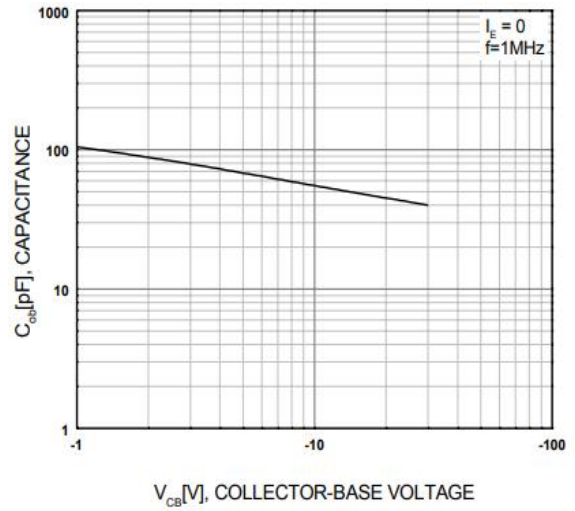


Fig.5 Current Gain Bandwidth Product

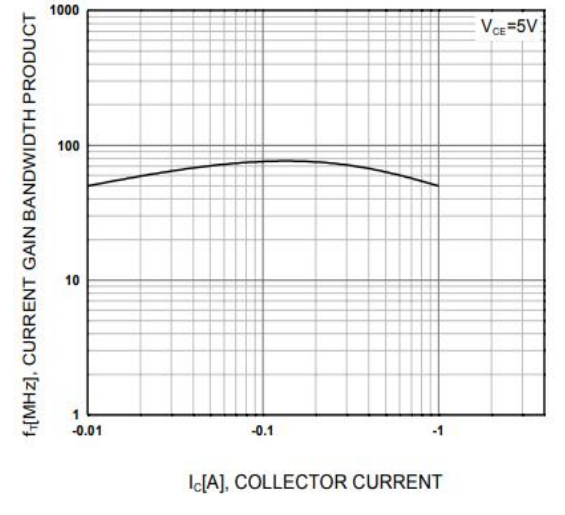
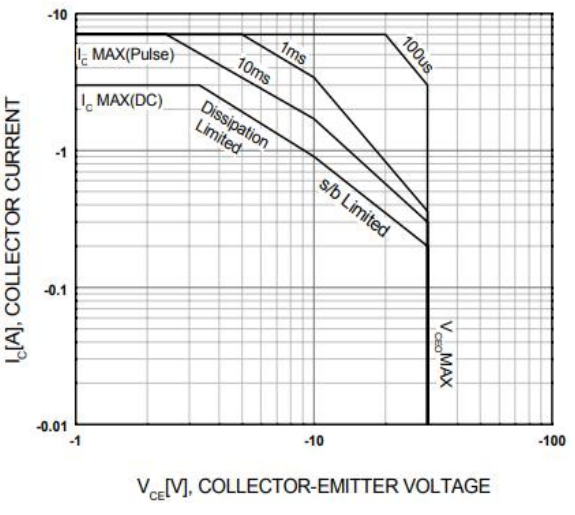
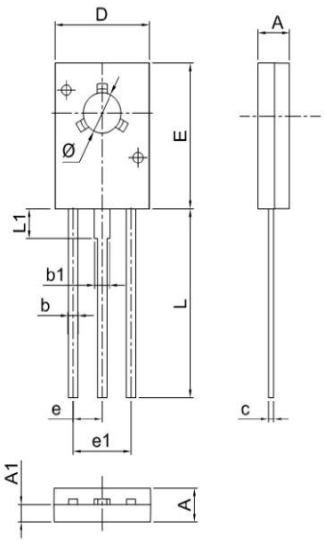


Fig.6 Power Derating

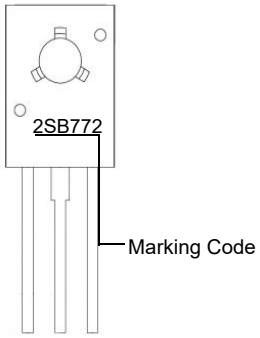


7. Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.094	0.114	2.40	2.90
A1	0.035	0.055	0.90	1.40
b	0.026	0.034	0.66	0.86
b1	0.046	0.054	1.17	1.37
c	0.015	0.024	0.38	0.60
D	0.287	0.315	7.30	8.00
E	0.417	0.433	10.60	11.00
e	0.089	0.092	2.25	2.33
e1	0.177	0.183	4.50	4.66
L	0.531	0.591	13.50	15.00

8. Part Marking System



9. Package Information

Package	Quantity(pcs)
2SB772	500

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