

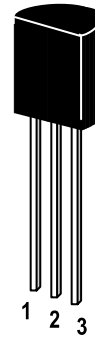
ST 2SB772S

PNP Silicon Epitaxial Transistor

Medium Power Low Voltage Transistor

The transistor is subdivided into three groups Q, P and E, according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base

TO-92 Plastic Package

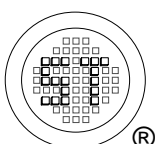
Weight approx. 0.19g

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$-V_{CBO}$	40	V
Collector-Emitter Voltage	$-V_{CEO}$	30	V
Emitter-Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	3	A
Peak Collector Current	$-I_{CM}$	7	A
Base Current	$-I_B$	600	mA
Collector Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 150	$^\circ\text{C}$

Characteristics ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE} = 2\text{ V}$, $-I_C = 1\text{ A}$ at $-V_{CE} = 2\text{ V}$, $-I_C = 20\text{ mA}$	Current Gain Group Q P E	h_{FE}	100	-	200	-
		h_{FE}	160	-	320	-
		h_{FE}	200	-	400	-
		h_{FE}	30	-	-	-
Collector Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	-	1	μA	
Emitter Cutoff Current at $-V_{EB} = 3\text{ V}$	$-I_{EBO}$	-	-	1	μA	
Collector-Emitter Saturation Voltage at $-I_C = 2\text{ A}$, $-I_B = 200\text{ mA}$	$-V_{CE(sat)}$	-	-	0.5	V	
Base-Emitter Saturation Voltage at $-I_C = 2\text{ A}$, $-I_B = 200\text{ mA}$	$-V_{BE(sat)}$	-	-	2	V	
Current Gain Bandwidth Product at $-V_{CE} = 5\text{ V}$, $-I_C = 0.1\text{ A}$	f_T	-	80	-	MHz	
Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	45	-	pF	



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 04/10/2006

Fig.1 Static characteristics

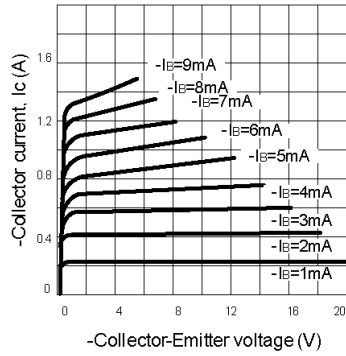


Fig.2 Derating curve of safe operating areas

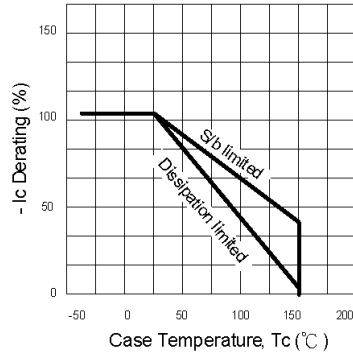


Fig.3 Power Derating

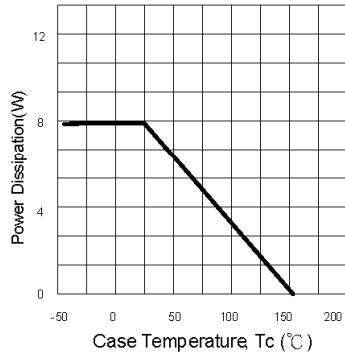


Fig.4 Collector Output capacitance

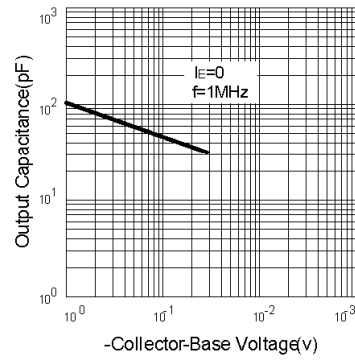


Fig.5 Current gain-bandwidth product

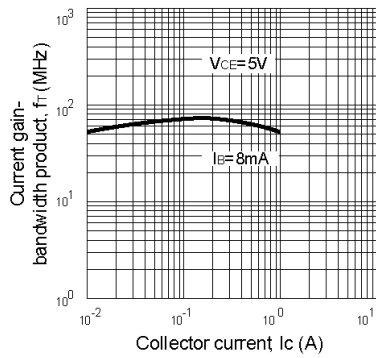


Fig.6 Safe Operating Area

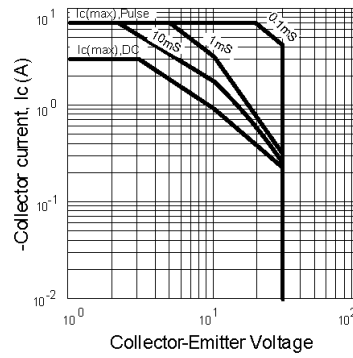


Fig.7 DC current gain

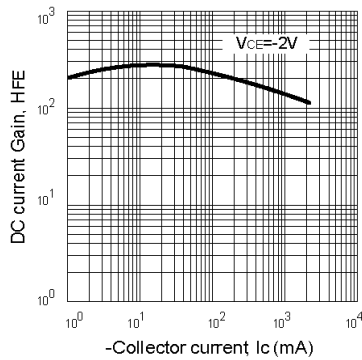
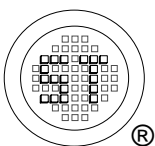
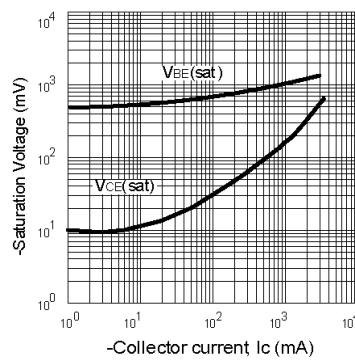


Fig.8 Saturation Voltage



SEMTECH ELECTRONICS LTD.
 (Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103
 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2000 Certificate No. 0506098