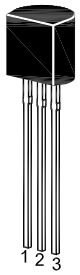
2SB772S

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

Absolute Maximum Ratings (T_a = 25 °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	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics (T_a = 25°C)

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

Fig.1 Static characteristics

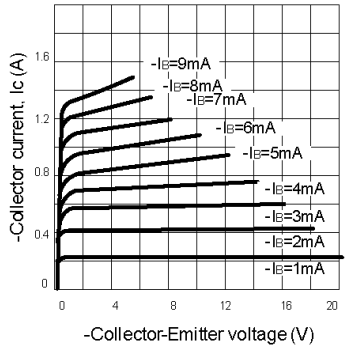


Fig.2 Derating curve of safe operating areas

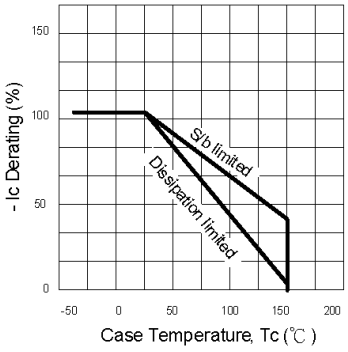


Fig.3 Power Derating

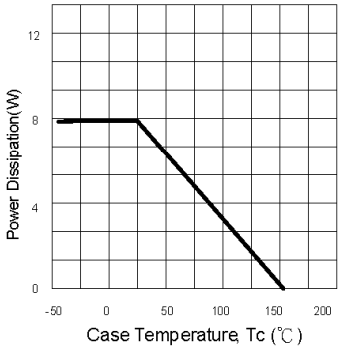


Fig.4 Collector Output capacitance

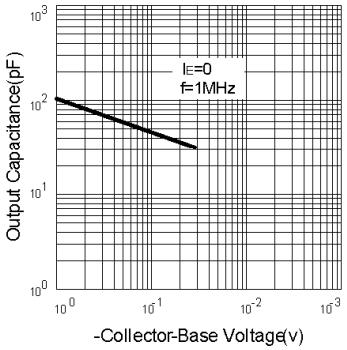


Fig.5 Current gain-bandwidth product

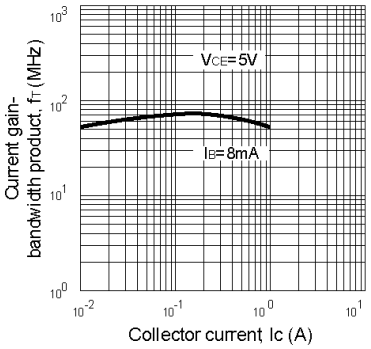


Fig.6 Safe Operating Area

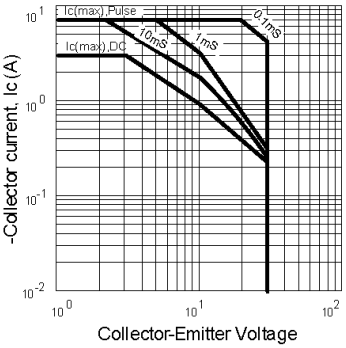


Fig.7 DC current gain

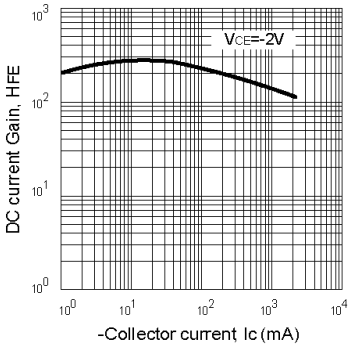


Fig.8 Saturation Voltage