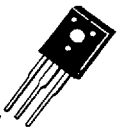
2SB772/2SB772S PNP Epitaxial Silicon Transistor

AUDIO FREQUENCY POWER AMPLIFIER
LOW SPEED SWITCHING
- Complement to 2SD882

TO-92

TO-126



1.Emitter 2.Collector 3.Base

ABSOLUTE MAXIMUM RATINGS (Ta = 25 ℃)

Characteristic	Symbol	2SB772S Max	2SB772 Max	Unit
Collector-Base Voltage	V_{CBO}	-50	-50	V
Collector-Emitter Voltage	V_{CEO}	-40	-40	V
Emitter-Bias Voltage	V_{EBO}	-5	-5	V
Collector Current (DC)	I_C	-2	-3	A
*Collector Current (Pulse)	I_C	-5	-7	A
Base Current (DC)	I_B	-0.6	-0.6	A
Collector Dissipation (Ta=25℃)	P_C	-	10	W
Collector Dissipation (Tc=25℃)	P_C	1	1	W
Junction Temperature	Tj	150	150	℃
Storage Temperature	Tstg	-55~150	-55~150	℃

- PW ≤ 10 μ s,Duty Cycle ≤ 50%

ELECTRICAL CHARACTERISTICS (Ta = 25℃)

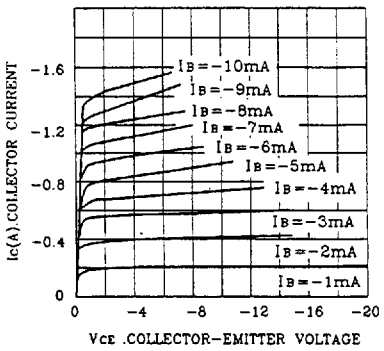
Characteristics	Symbol	Test condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}=-30V,I_E=0			-1	μ A
Emitter Cutoff Current	I_{EBO}	V_{EB}=-3V,I_C=0			-1	μ A
*DC Current Gain	h_{FE1}	V_{CE}=-2V,I_C=-20mA	30	220		
	h_{FE2}	V_{CE}=-2V,I_C=-1A	60	160	400	
*Collector Emitter Saturation Voltage	$V_{CE(SAT)}$	I_C=-2A,I_B=-0.2A		-0.3	-0.45	V
*Base Emitter Saturation Voltage	$V_{BE(SAT)}$	I_C=-2A,I_B=-0.2A		-1.0	-2.0	V
Current Gain Bandwidth Product	f_T	V_{CE}=-5V,I_C=0.1A		80		MHz
Output Capacitance	Cob	V_{CB}=-10V,I_E=0 f=1MHz		55		pF
Noise Figure	NF	V_{CE}=10V,I_C=1mA R_S=10KΩ,f=1KHz		4		dB

- Pulse Test PW ≤ 350 μ s,Duty Cycle ≤ 2%

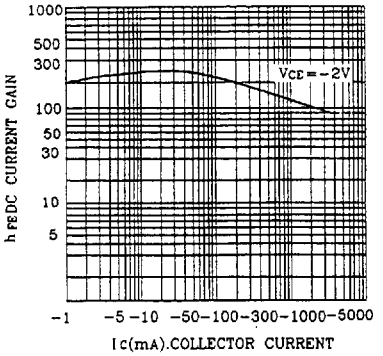
h_{FE}(2) CLASSIFICATION

Classification	R	O	Y	G
h_{FE}(2)	60-120	100-200	160-320	200-400

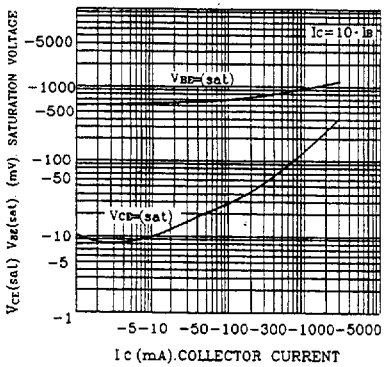
STATIC CHARACTERISTIC



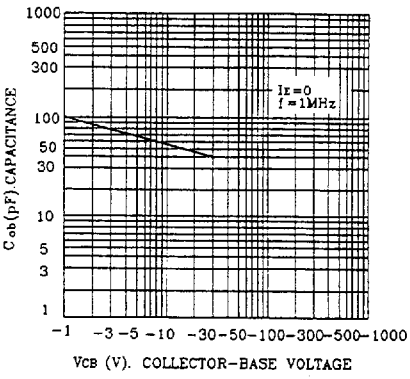
DC CURRENT GAIN



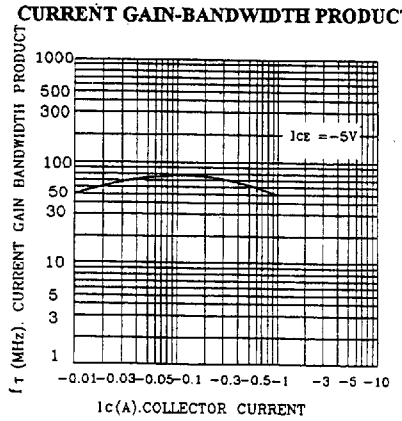
BASE-EMITTER SATURATION VOLTAGE COLLECTOR-EMITTER SATURATION VOLTAGE



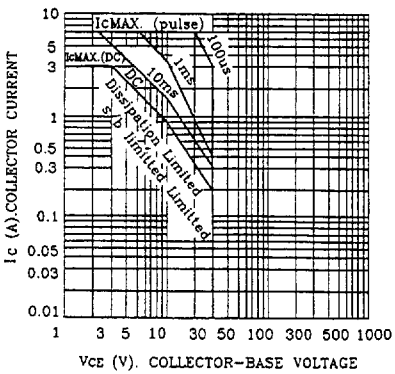
COLLECTOR OUTPUT CAPACITANCE



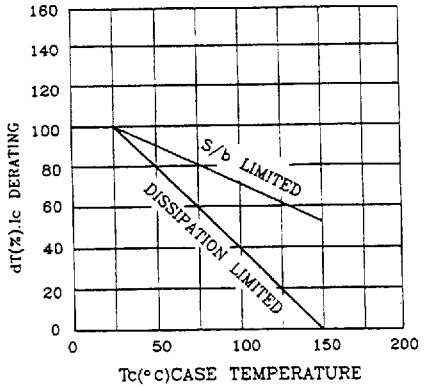
CURRENT GAIN-BANDWIDTH PRODUCT



SAFE OPERATING AREAS



DERATING CURVE OF SAFE OPERATING AREAS



POWER DERATING