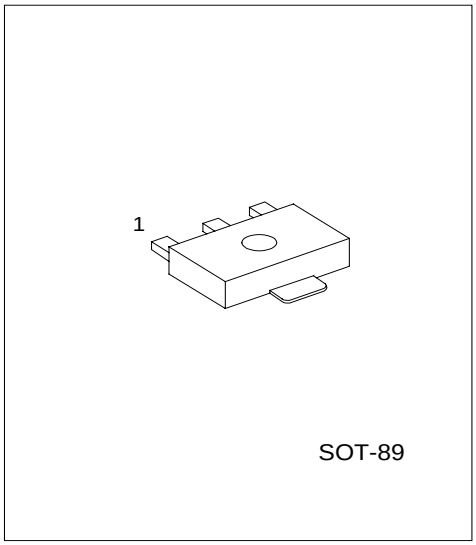
2SB772S

PNP EPITAXIAL SILICON TRANSISTOR

MEDIUM POWER LOW VOLTAGE TRANSISTOR



*Pb-free plating product number: 2SB772SL

■ DESCRIPTION

The UTC 2SB772S is a medium power low voltage transistor, designed for audio power amplifier, DC-DC converter and voltage regulator.

■ FEATURES

*High current output up to 3A
*Low saturation voltage
*Complement to 2SD882S

■ PIN CONFIGURATION

PIN NO.	PIN NAME
1	Emitter
2	Collector
3	Base

■ ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead free		
2SB772S-AB3-R	2SB772SL-AB3-R	SOT-89	Tape Reel

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■ ABSOLUATE MAXIUM RATINGS (Ta = 25℃)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector -Base Voltage	V_{CBO}	-40	V
Collector -Emitter Voltage	V_{CEO}	-30	V
Emitter -Base Voltage	V_{EBO}	-5	V
Peak Collector Current	I_{CM}	-7	A
DC Collector Current	I_C	-3	A
Base Current	I_B	-0.6	A
Power Dissipation	P_D	1.0	W
Junction Temperature	T_J	+150	℃
Storage Temperature	T_{STG}	-40 ~ +150	℃

■ ELECTRICAL CHARACTERISTICS (Ta= 25℃, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V,I_E=0			-1000	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-3V,Ic=0			-1000	nA
DC Current Gain(Note 1)	h_{FE1} h_{FE2}	V_{CE}=-2V,Ic=-20mA V_{CE}=-2V,Ic=-1A	30 100	200 150	 400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	Ic=-2A,I_B=-0.2A		-0.3	-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	Ic=-2A,I_B=-0.2A		-1.0	-2.0	V
Current Gain Bandwidth Product	f_T	V_{CE}=-5V,Ic=-0.1A		80		MHz
Output Capacitance	Cob	V_{CB}=-10V,I_E=0,f=1MHz		45		pF

Note 1: Pulse test: P_W<300μs, Duty Cycle<2%

■ CLASSIFICATION OF hFE2

RANK	Q	P	E
RANGE	100 ~ 200	160 ~ 320	200 ~ 400

■ TYPICAL CHARACTERICS

Fig.1 Static characteristics

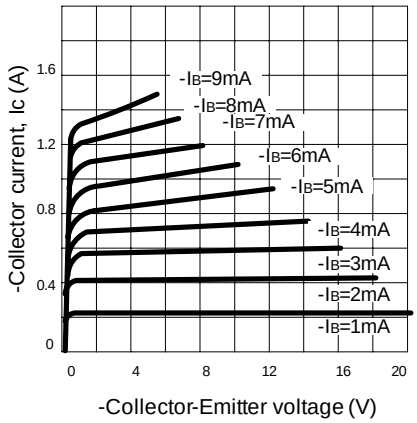


Fig.2 Derating curve of safe operating areas

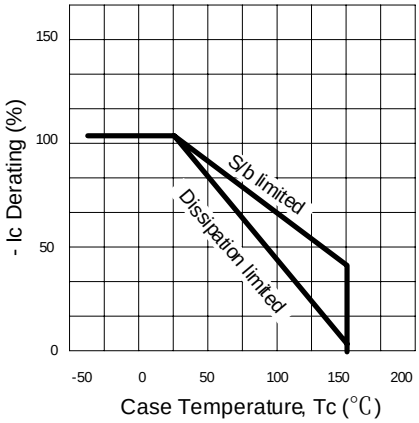


Fig.3 Power Derating

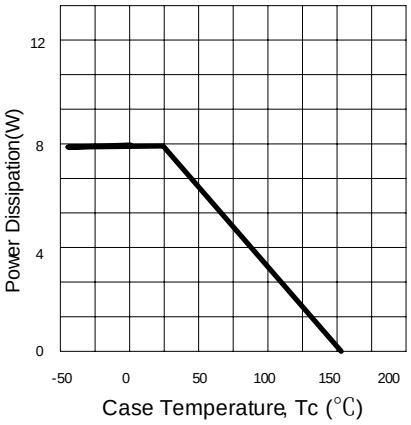


Fig.4 Collector Output capacitance

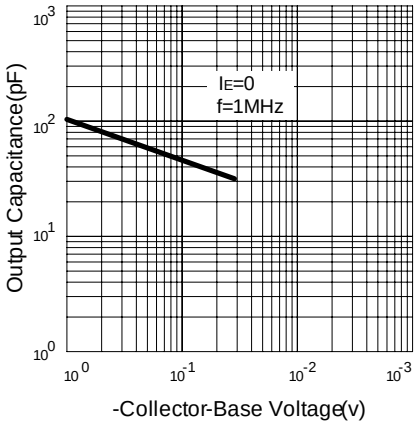


Fig.5 Current gain-bandwidth product

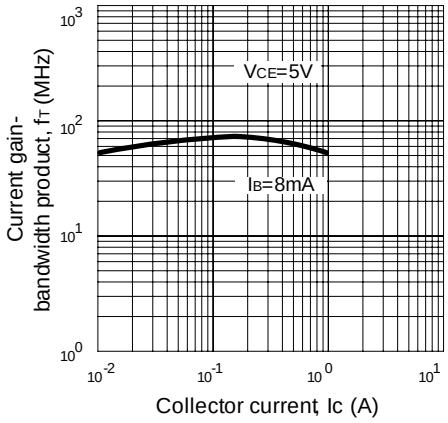
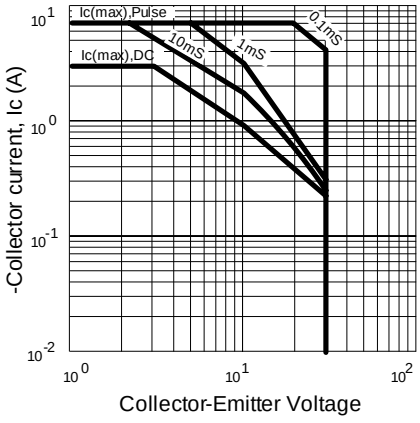


Fig.6 Safe Operating Area



■ TYPICAL CHARACTERICS(cont.)

Fig.7 DC current gain

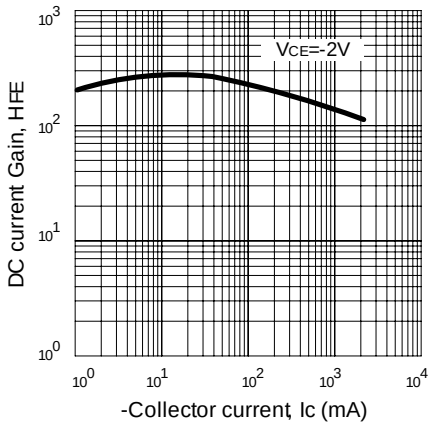
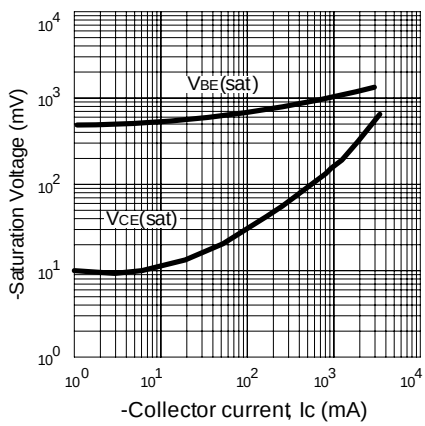


Fig.8 Saturation Voltage



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