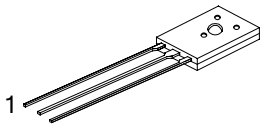
2SB772

PNP EPITAXIAL SILICON TRANSISTOR

MEDIUM POWER LOW VOLTAGE TRANSISTOR



TO-126C

* Pb-free plating product number: 2SB772L

■ DESCRIPTION

The UTC **2SB772** 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 2SD882

■ PIN CONFIGURATION

PIN NO.	PIN NAME
1	Base
2	Collector
3	Emitter

■ ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead free		
2SB772-T6C-T	2SB772L-T6C-T	TO-126C	Tube

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C , unless otherwise specified)

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
Base Current		I_B	-0.6	A
Collector Current	DC	I_C	-3	A
	PULSE	I_{CM}	-7	
Collector Dissipation	Tc=25°C	Pc	10	W
	Ta=25°C		1	
Junction Temperature		T_J	+150	°C
Storage Temperature		T_{STG}	-40 ~ +150	°C

■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified.)

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

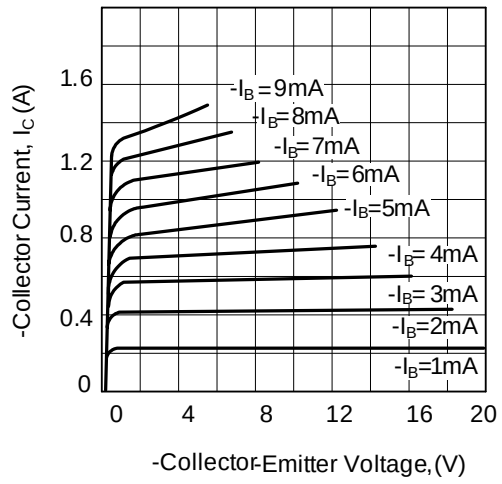
Note 1: Pulse test: PW<300μs, Duty Cycle<2%

■ CLASSIFICATION OF hFE2

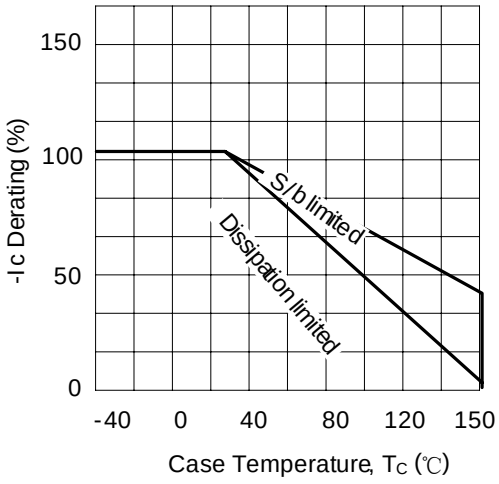
RANK	Q	P	E
RANGE	100 ~ 200	160 ~ 320	200 ~ 400

■ TYPICAL CHARACTERISTICS

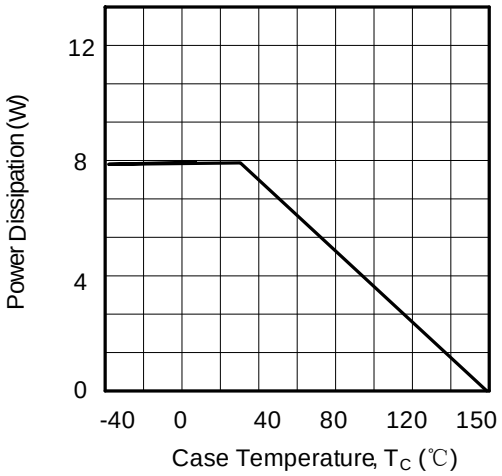
Static characteristics



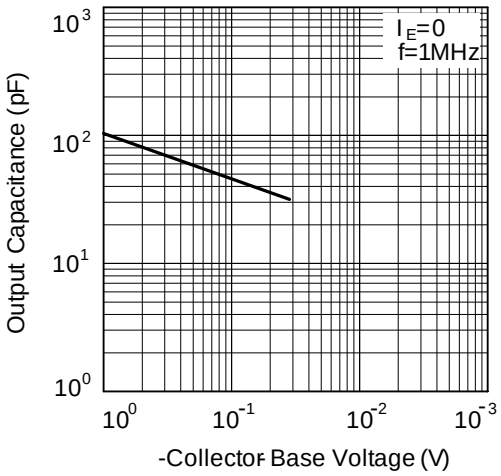
Derating curve of safe operating areas



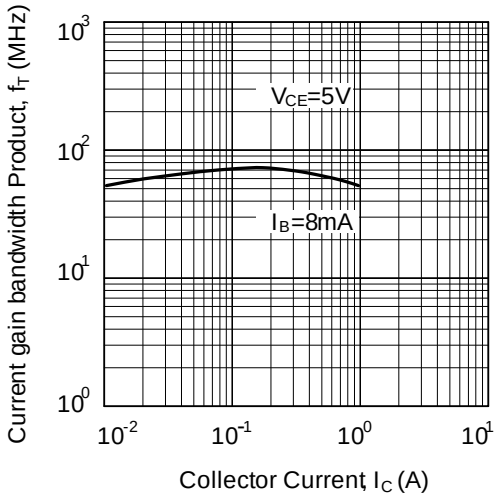
Power derating



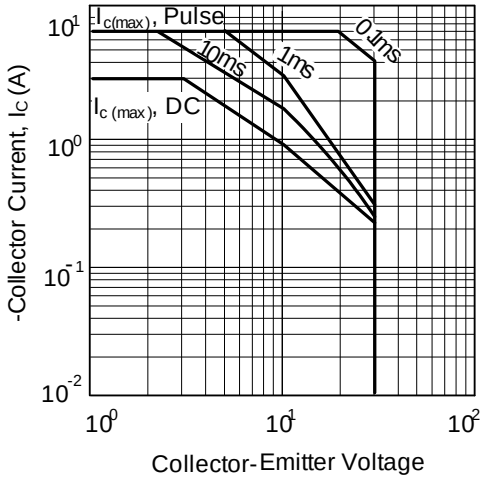
Collector output capacitance



Current gain-bandwidth product

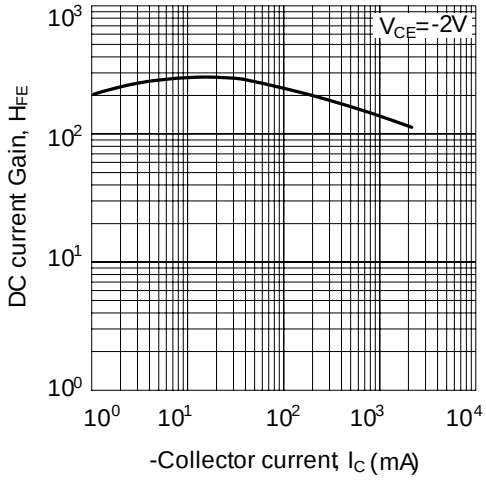


Safe operating area



■ TYPICAL CHARACTERISTICS (cont.)

DC current gain



Saturation Voltage