

UTC2SB772S PNP EPITAXIAL SILICON TRANSISTOR

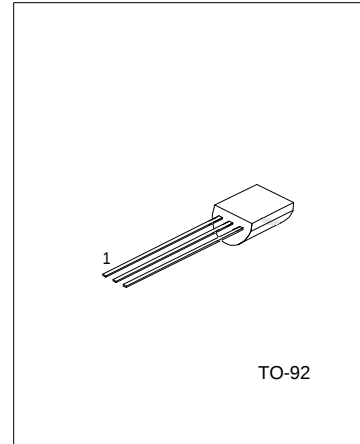
MEDIUM POWER LOW VOLTAGE TRANSISTOR

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



1:EMITTER 2:COLLECTOR 3:BASE

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

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CE0}	-30	V
Emitter-Base Voltage	V _{EB0}	-5	V
Collector Dissipation(Tc=25°C)	P _c	10	W
Collector Dissipation(Ta=25°C)	P _c	1	W
Collector Current(DC)	I _c	-3	A
Collector Current(PULSE)	I _c	-7	A
Base Current	I _B	-0.6	A
Junction Temperature	T _j	150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C, 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, 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	
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
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 hFE

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

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TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Static characteristics

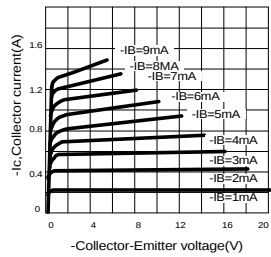


Fig.2 Derating curve of safe operating areas

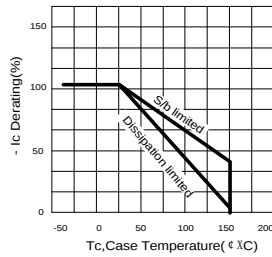


Fig.3 Power Derating

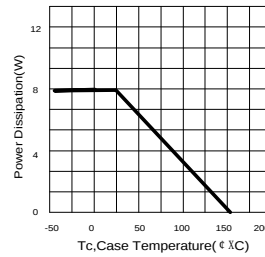


Fig.4 Collector Output capacitance

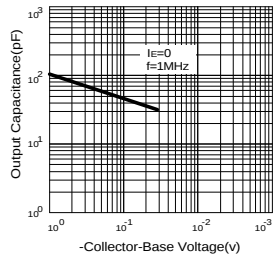


Fig.5 Current gain-bandwidth product

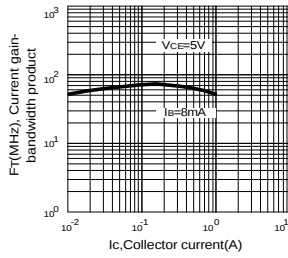


Fig.6 Safe operating area

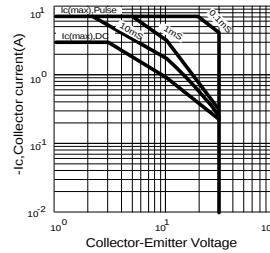


Fig.7 DC current gain

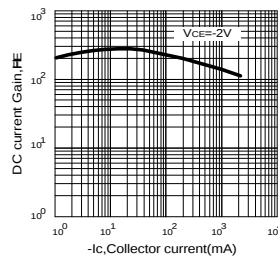


Fig.8 Saturation Voltage

