

UTC2SB772NL PNP EPITAXIAL SILICON TRANSISTOR

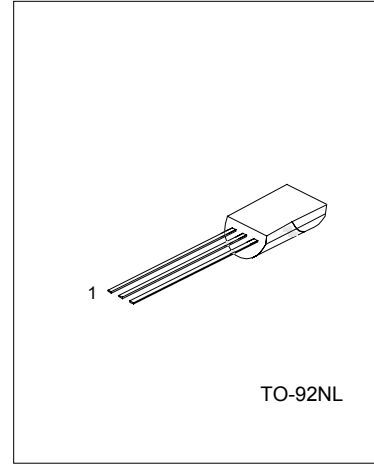
MEDIUM POWER LOW VOLTAGE TRANSISTOR

DESCRIPTION

The UTC 2SB772NL 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 2SD882NL



1:EMITTER 2:COLLECTOR 3:BASE

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

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	VCBO	-40	V
Collector-Emitter Voltage	VCEO	-30	V
Emitter-Base Voltage	VEBO	-5	V
Collector Dissipation (Ta=25°C)	Pc	0.5	W
Collector Current (DC)	Ic	-3	A
Collector Current (PULSE)	Ic	-7	A
Base Current	IB	-0.6	A
Junction Temperature	Tj	150	°C
Storage Temperature	TSTG	-55 ~ +150	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	ICBO	VCB=-30V, IE=0			-1000	nA
Emitter Cut-Off Current	IEBO	VEB=-3V, IC=0			-1000	nA
DC Current Gain(note 1)	hFE1 hFE2	VCE=-2V, IC=-20mA VCE=-2V, IC=-1A	30 100	200 150	400	
Collector-Emitter Saturation Voltage	VCE(sat)	IC=-2A, IB=-0.2A		-0.3	-0.5	V
Base-Emitter Saturation Voltage	VBE(sat)	IC=-2A, IB=-0.2A		-1.0	-2.0	V
Current Gain Bandwidth Product	fT	VCE=-5V, IC=-0.1A		80		MHz
Output Capacitance	Cob	VCB=-10V, IE=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

UTC UNISONIC TECHNOLOGIES CO. LTD

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TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Static characteristics

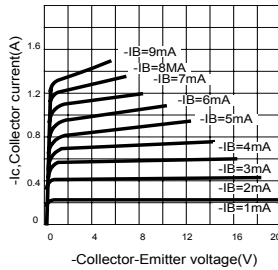


Fig.2 Derating curve of safe operating areas

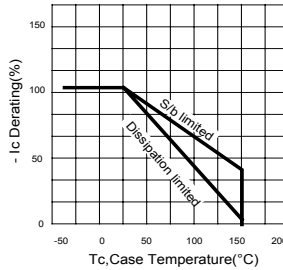


Fig.3 Power Derating

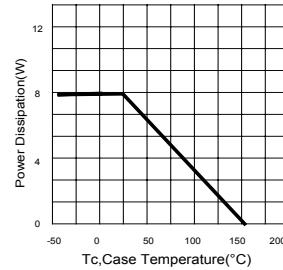


Fig.4 Collector Output capacitance

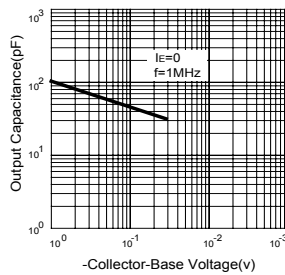


Fig.5 Current gain-bandwidth product

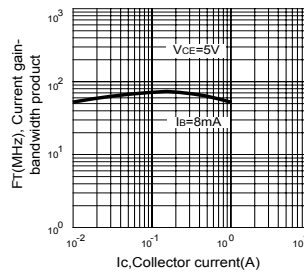


Fig.6 Safe operating area

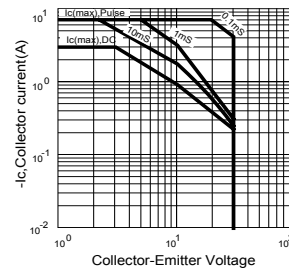


Fig.7 DC current gain

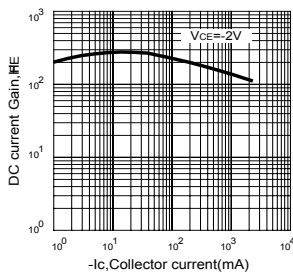
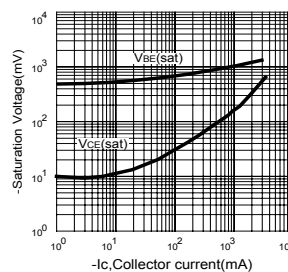


Fig.8 Saturation Voltage



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