

UTC2SB776

PNP EPITAXIAL SILICON TRANSISTOR

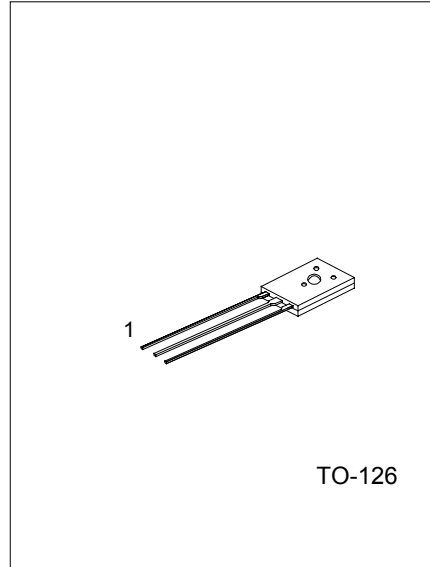
MEDIUM POWER LOW VOLTAGE TRANSISTOR

DESCRIPTION

The UTC 2SB776 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 2SD886



1:EMITTER 2:COLLECTOR 3:BASE

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

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	VCBO	-50	V
Collector-Emitter Voltage	VCEO	-50	V
Emitter-Base Voltage	VEBO	-5	V
Collector Dissipation (Tc=25°C)	Pc	10	W
Collector Dissipation (Ta=25°C)	Pc	1	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	V _{CB} =-50V, I _E =0			-1000	nA
Emitter Cut-Off Current	IEBO	V _{EB} =-3V, I _C =0			-1000	nA
DC Current Gain(note 1)	hFE1 hFE2	V _{CE} =-2V, I _C =-20mA V _{CE} =-2V, I _C =-1A	100 100	200 150	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%

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CLASSIFICATION OF hFE2

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

TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Static characteristics

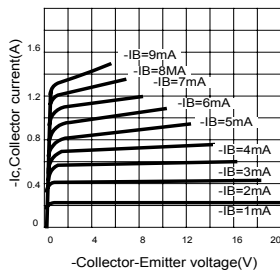


Fig.2 Derating curve of safe operating areas

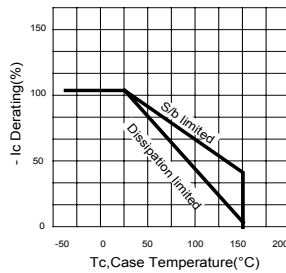


Fig.3 Power Derating

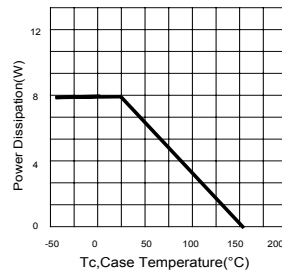


Fig.4 Collector Output capacitance

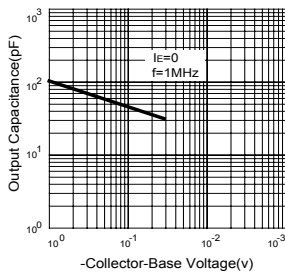


Fig.5 Current gain-bandwidth product

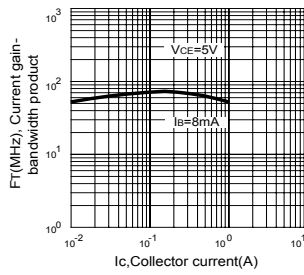


Fig.6 Safe operating area

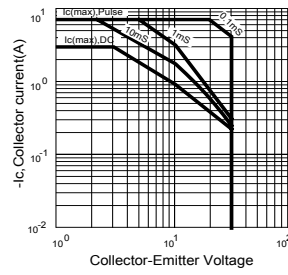


Fig.7 DC current gain

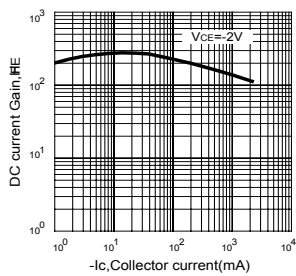
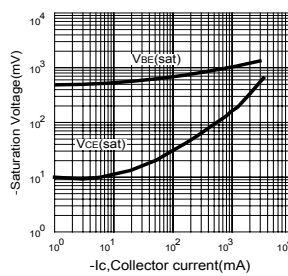


Fig.8 Saturation Voltage



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