



B772SS

PNP SILICON TRANSISTOR

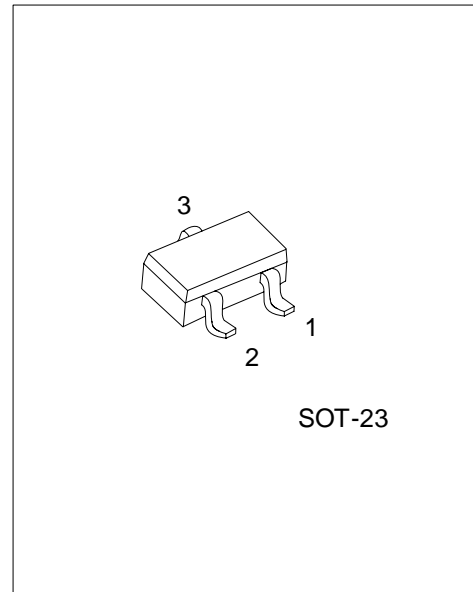
MEDIUM POWER LOW VOLTAGE TRANSISTOR

DESCRIPTION

The UTC B772SS 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 D882SS



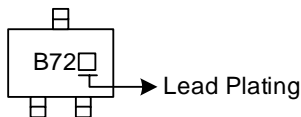
*Pb-free plating product number: B772SSL

ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
B772SS-x-AE3-R	B772SSL-x-AE3-R	SOT-23	E	B	C	Tape Reel

<p>B772SSL-x-AE3-R</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Lead Plating</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23 (3) x: refer to Classification of h_{FE2} (4) L: Lead Free Plating, Blank: Pb/Sn</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS (Ta = 25)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CEO}	-30	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	Pulse	I _{CP}	-7
	DC	I _C	-3
Base Current	I _B	-0.6	A
Collector Dissipation	T _C =25	P _D	10
	T _a =25		350
Junction Temperature	T _J	+150	
Storage Temperature	T _{STG}	-55 ~ +150	

Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV _{CB0}	I _C =-100μA, I _E =0	-40			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =-1mA, I _B =0	-30			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =-100μA, I _C =0	-5			V
Collector Cut-Off Current	I _{CB0}	V _{CB} =-30V, I _E =0			-1000	nA
Collector Cut-Off Current	I _{CEO}	V _{CE} =-30V, I _B =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	Cob	V _{CB} =-10V, I _E =0, f=1MHz		45		pF

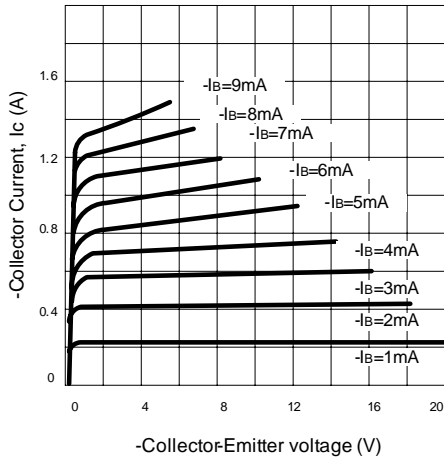
Note 1: Pulse test: P_w<300μs, Duty Cycle<2%

■ CLASSIFICATION OF h_{FE2}

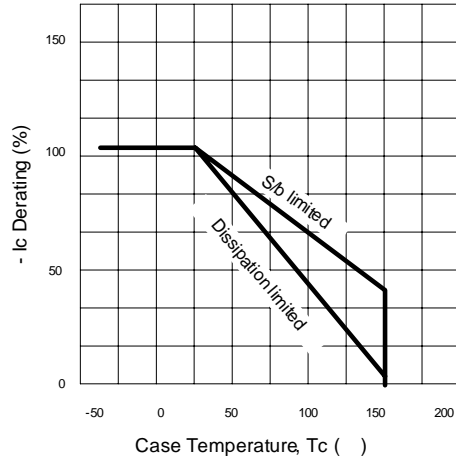
RANK	Q	P	E
RANGE	100 ~ 200	160 ~ 320	200 ~ 400

TYPICAL CHARACTERISTICS

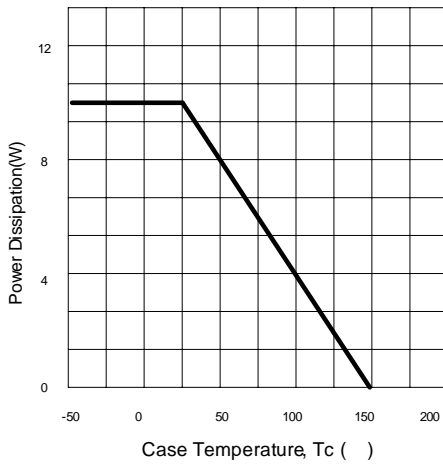
Static Characteristics



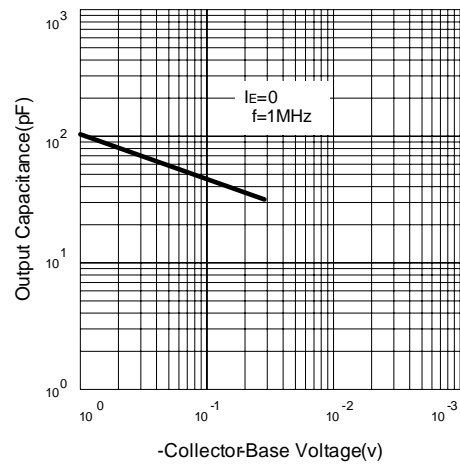
Derating Curve of Safe Operating Areas



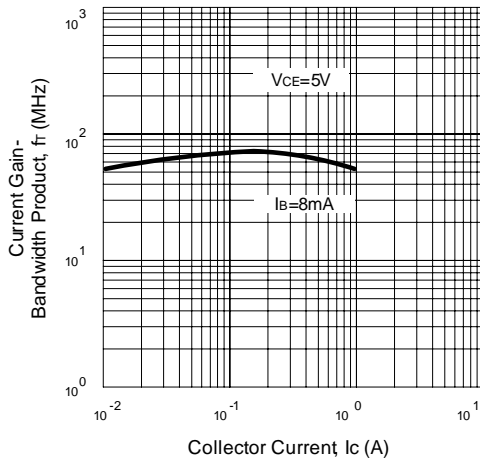
Power Derating



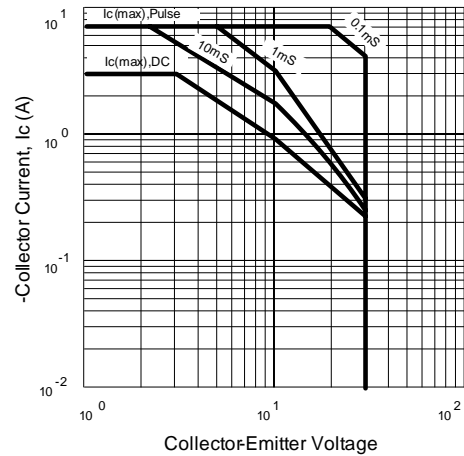
Collector Output Capacitance



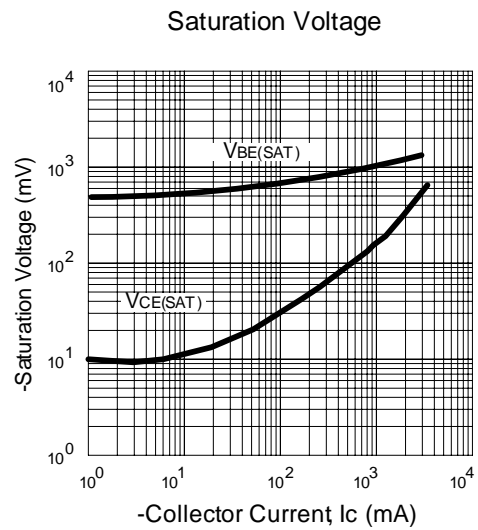
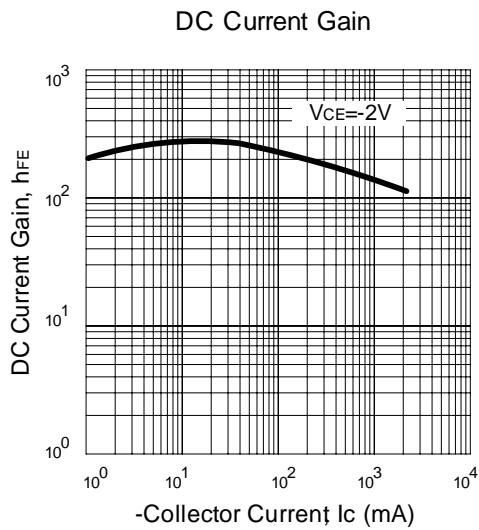
Current Gain - Bandwidth Product



Safe Operating Area



TYPICAL CHARACTERISTICS(Cont.)



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