



UNISONIC TECHNOLOGIES CO., LTD

2SD882S

NPN SILICON TRANSISTOR

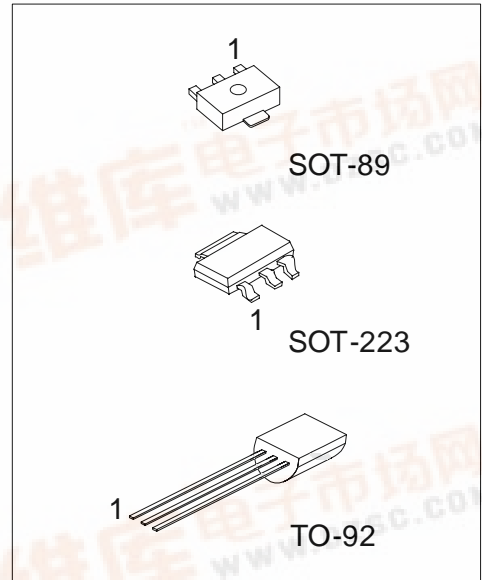
MEDIUM POWER LOW VOLTAGE TRANSISTOR

FEATURES

- * High current output up to 3A
- * Low saturation voltage
- * Complement to 2SB772S

APPLICATIONS

- * Audio power amplifier
- * DC-DC convertor
- * Voltage regulator



*Pb-free plating product number: 2SD882SSL

ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
2SD882S-x-AA3-R	2SD882SL-x-AA3-R	SOT-223	B	C	E	Tape Reel
2SD882S-x-AB3-R	2SD882SL-x-AB3-R	SOT-89	B	C	E	Tape Reel
2SD882S-x-T92-B	2SD882SL-x-T92-B	TO-92	E	C	B	Tape Box
2SD882S-x-T92-K	2SD882SL-x-T92-K	TO-92	E	C	B	Bulk

<p>2SD882SL-x-AA3-R</p>	<p>(1) Packing Type (2) Package Type (3) Rank (4) Lead Plating</p> <p>(1) B: Tape Box, K: Bulk, R: Tape Reel (2) AA3: SOT-223, AB3: SOT-89, T92: TO-92 (3) x: refer to Classification of h_{FE2} (4) L: Lead Free Plating, Blank: Pb/Sn</p>
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■ ABSOLUTE MAXIMUM RATING (Ta=25 , 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
Collector Current	DC	I _C	3	A
	Pulse	I _{CP}	7	A
Base Current		I _B	0.6	A
Power Dissipation	SOT-89	P _D	0.5	W
	SOT-223		1	W
	TO-92		0.5	W
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 _{CBO}	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 _{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

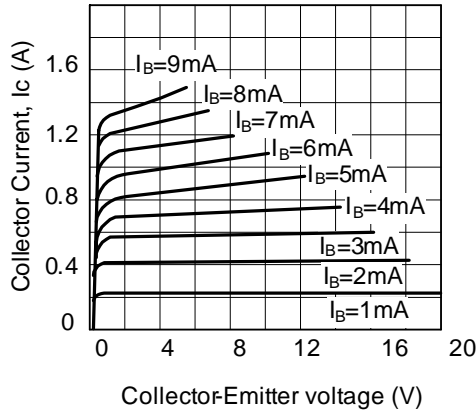
Note 1: Pulse test: PW<300μs, Duty Cycle<2%

■ CLASSIFICATION OF h_{FE2}

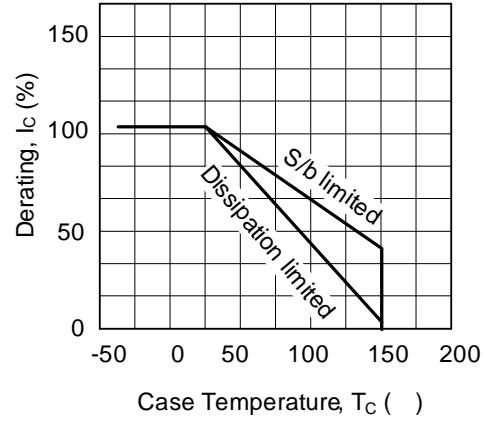
RANK	Q	P	E
RANGE	100-200	160-320	200-400

■ TYPICAL CHARACTERISTICS

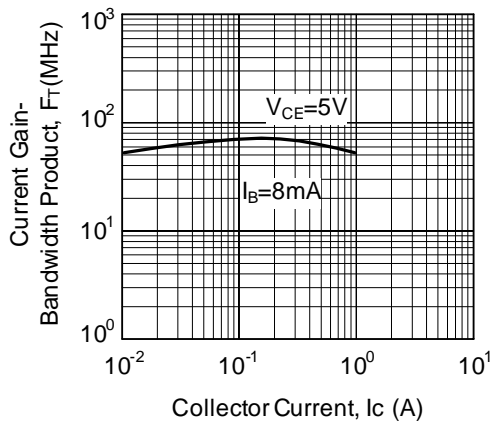
Static Characteristics



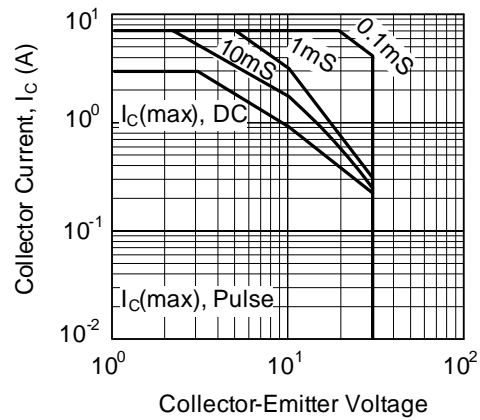
Derating Curve of Safe Operating Areas



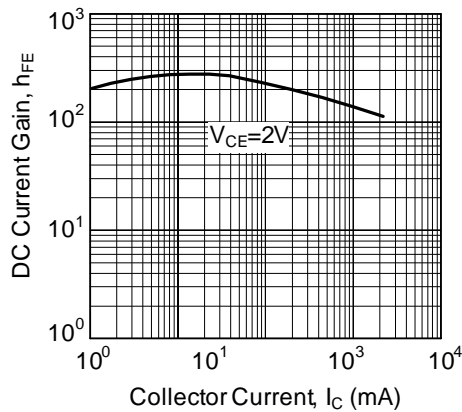
Current Gain-Bandwidth Product



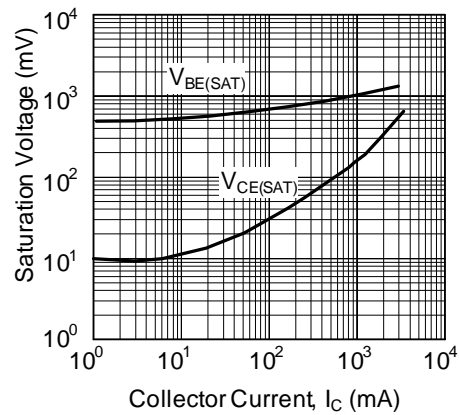
Safe Operating Area



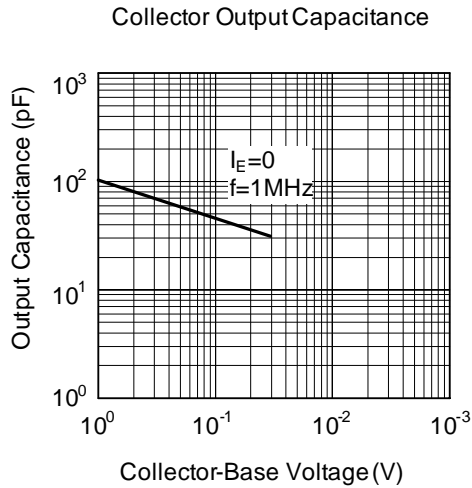
DC Current Gain



Saturation Voltage



■ TYPICAL CHARACTERISTICS(Cont.)



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