

UTC2SD882ANL NPN EPITAXIAL SILICON TRANSISTOR

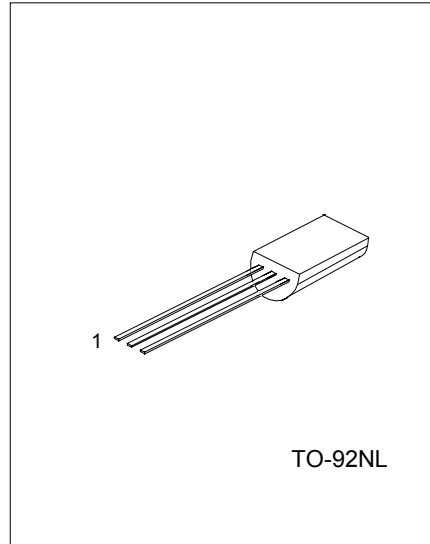
MEDIUM POWER LOW VOLTAGE TRANSISTOR

FEATURES

- *High current output up to 3A
- *Low saturation voltage
- *Complement to 2SB772ANL

APPLICATIONS

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



1:EMITTER 2:COLLECTOR 3:BASE

*Pb-free plating product number: 2SD882ANLK

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETERS	SYMBOL	RATINGS	UNIT
Collector-base voltage	V _{CB0}	40	V
Collector-emitter voltage	V _{CEO}	30	V
Emitter-base voltage	V _{EB0}	5	V
Collector dissipation	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%

UTC2SD882ANL NPN EPITAXIAL SILICON TRANSISTOR

CLASSIFICATION OF hFE2

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

TYPICAL PARAMETERS PERFORMANCE

Fig.1 Static characteristics

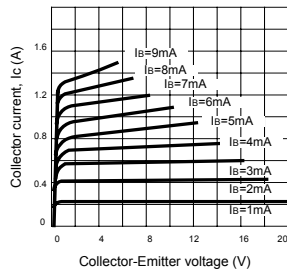


Fig.2 Derating curve of safe operating areas

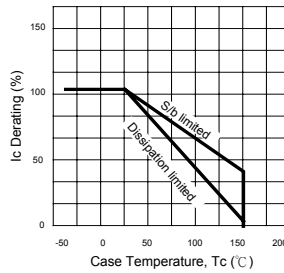


Fig.3 Power Derating

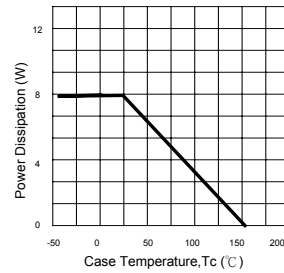


Fig.4 Collector Output capacitance

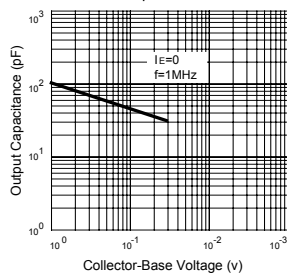


Fig.5 Current gain-bandwidth product

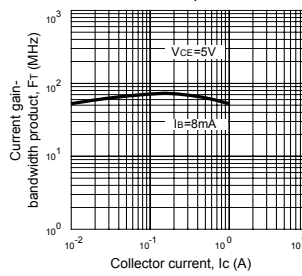


Fig.6 Safe operating area

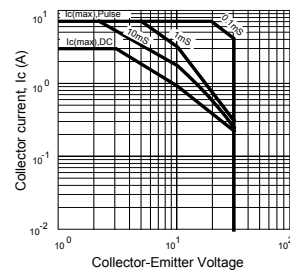


Fig.7 DC current gain

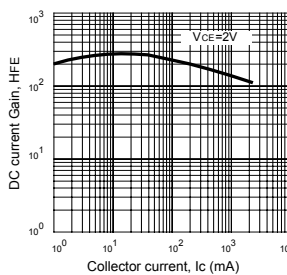
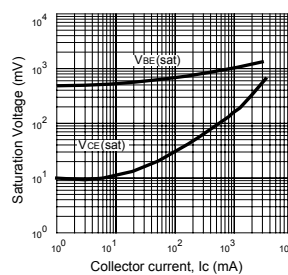


Fig.8 Saturation Voltage



UTC2SD882ANL NPN EPITAXIAL SILICON TRANSISTOR

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.