



2SD880

NPN SILICON TRANSISTOR

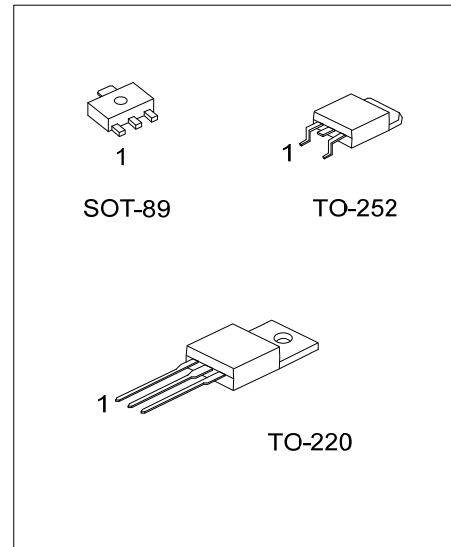
NPN EPITAXIAL TRANSISTOR

■ DESCRIPTION

The UTC **2SD880** is designed for audio frequency power amplifier applications.

■ FEATURES

- * High DC Current Gain: $h_{FE}=200$ (Max.) ($V_{CE}=5V$, $I_C=0.5A$)
- * Low Saturation Voltage: $V_{CE(SAT)}=1.0V$ (Max.) ($I_C=3A$, $I_B=0.3A$)
- * Complementary to 2SB834



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SD880L-AB3-R	2SD880G-AB3-R	SOT-89	B	C	E	Tape Reel
2SD880L-TA3-T	2SD880G-TA3-T	TO-220	B	C	E	Tube
2SD880L-TN3-R	2SD880G-TN3-R	TO-252	B	C	E	Tape Reel

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>2SD880G-AB3-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) T: Tube, R: Tape Reel (2) AB3: SOT-89, TA3: TO-220, TN3: TO-252 (3) G: Halogen Free and Lead Free, L: Lead Free
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■ MARKING

SOT-89	TO-220 / TO-252

■ ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector to Base Voltage		V_{CBO}	60	V
Collector to Emitter Voltage		V_{CEO}	60	V
Emitter to Base Voltage		V_{EBO}	7	V
Collector Current		I_C	3	A
Base Current		I_B	0.5	A
Power Dissipation (Note 2)	SOT-89	P_D	0.55	W
	TO-220		1.5	W
	TO-252		1	W
	SOT-89		3	W
	TO-220		30	W
	TO-252		20	W
Junction Temperature		T_J	+150	W
Storage Temperature		T_{STG}	-55 ~ +150	$^\circ\text{C}$

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

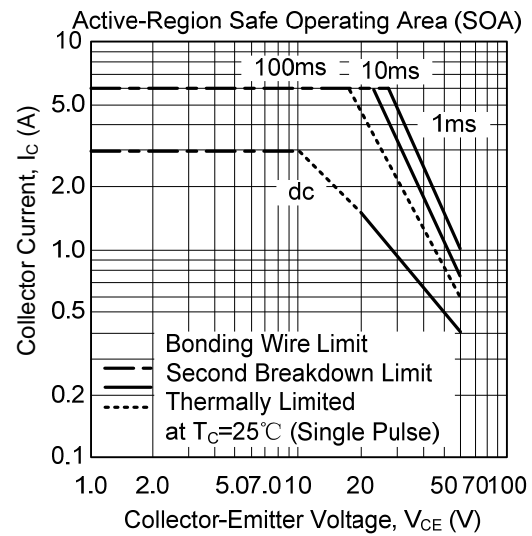
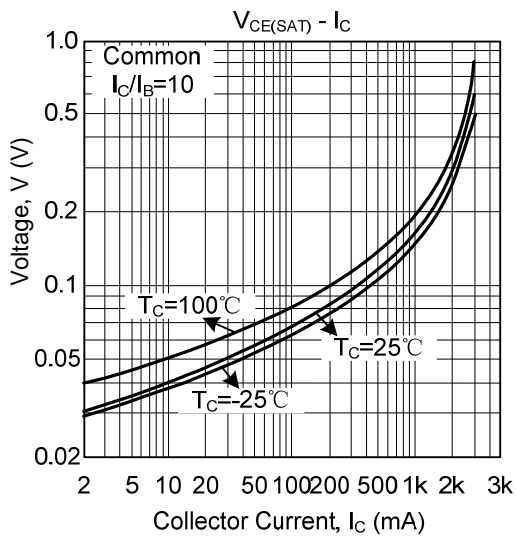
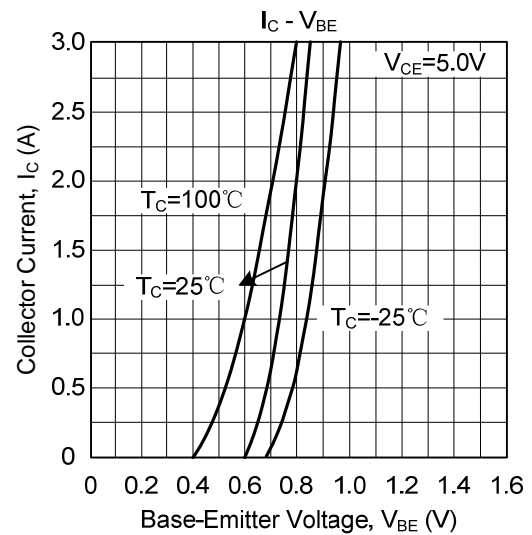
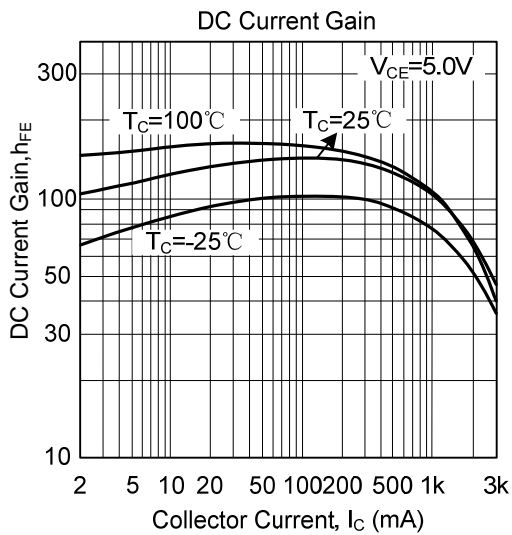
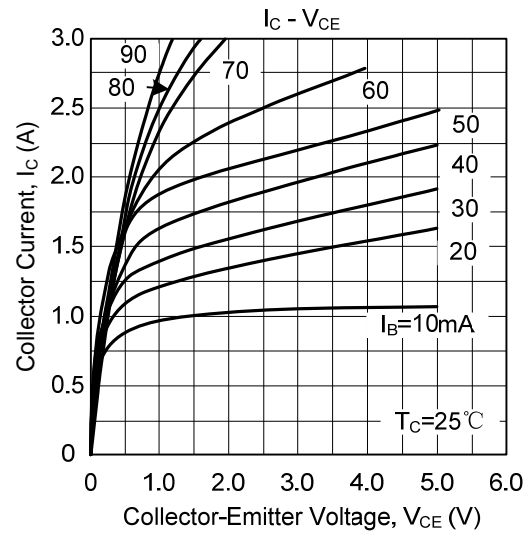
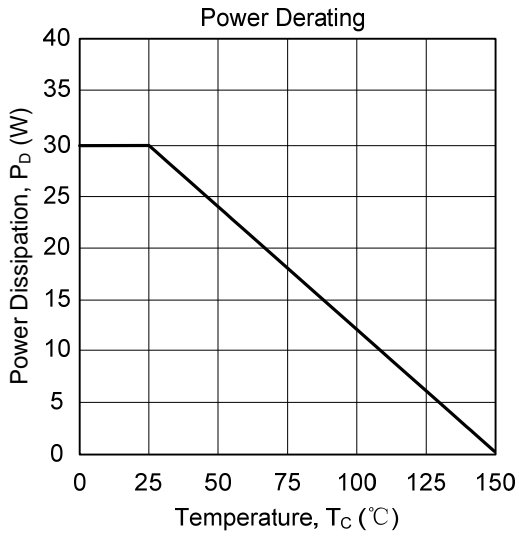
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. Device mounted on FR-4 substrate PC board, 2oz copper, with 1inch square copper plate.

■ ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=50\text{mA}$, $I_E=0$	60			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60\text{V}$, $I_E=0$			100	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=7\text{V}$, $I_C=0$			100	μA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=3\text{A}$, $I_B=300\text{mA}$			1	V
Base-Emitter Saturation Voltage	$V_{BE(ON)}$	$V_{CE}=5\text{V}$, $I_C=500\text{mA}$			1	V
DC Current Gain	h_{FE}	$I_C=500\text{mA}$, $V_{CE}=5\text{V}$	100		200	
Current gain bandwidth product	f_T	$V_{CE}=5\text{V}$, $I_C=500\text{mA}$		3		MHZ

TYPICAL CHARACTERISTICS



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. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.