



## 2SD880

## NPN SILICON TRANSISTOR

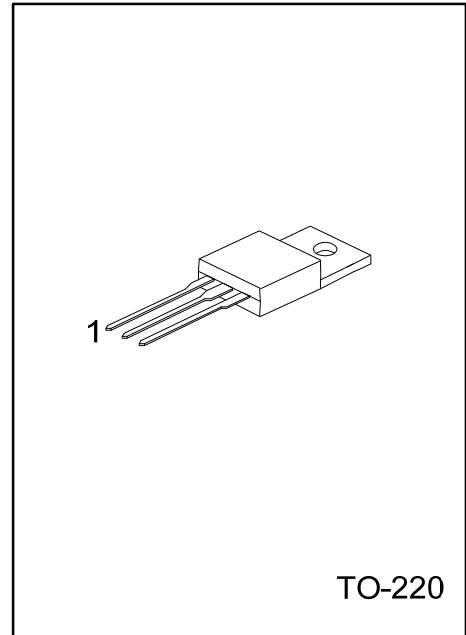
### NPN EPITAXIAL TRANSISTOR

#### DESCRIPTION

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

#### FEATURES

- \* High DC Current Gain:  $h_{FE}=200(\text{Max.})(V_{CE}=5V, I_C=0.5A)$
- \* Low Saturation Voltage:  $V_{CE(SAT)}=1.0V(\text{Max.})(I_C=3A, I_B=0.3A)$
- \* High Power Dissipation:  $P_C=30W (T_A=25^\circ\text{C})$
- \* Complementary to 2SB834



#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SD880L-TA3-T	2SD880G-TA3-T	TO-220	B	C	E	Tube

<p>2SD880L-TA3-T</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Lead Free</li> </ul>	<ul style="list-style-type: none"> <li>(1) T: Tube</li> <li>(2) TA3: TO-220</li> <li>(3) G: Halogen Free, L: Lead Free</li> </ul>
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■ ABSOLUTE MAXIMUM RATINGS

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	$P_D$	30	W
Junction Temperature	$T_J$	+150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

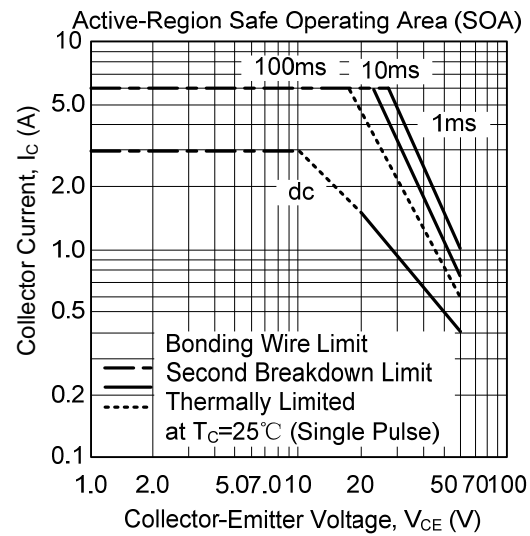
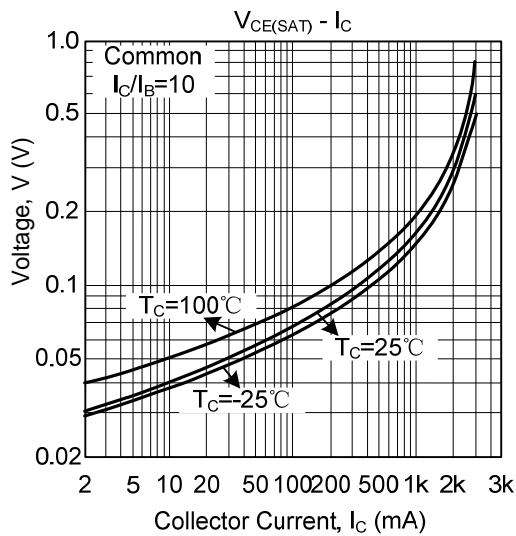
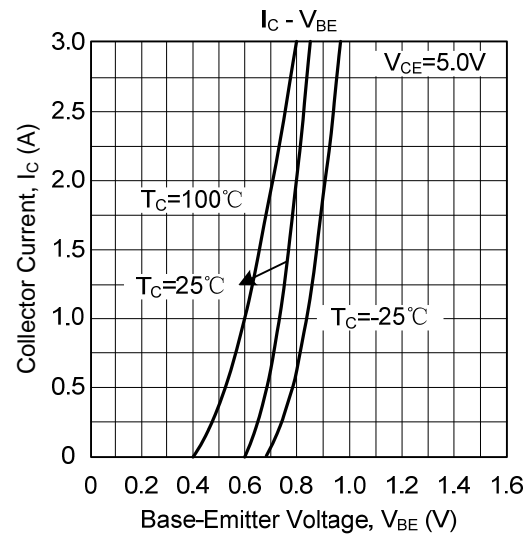
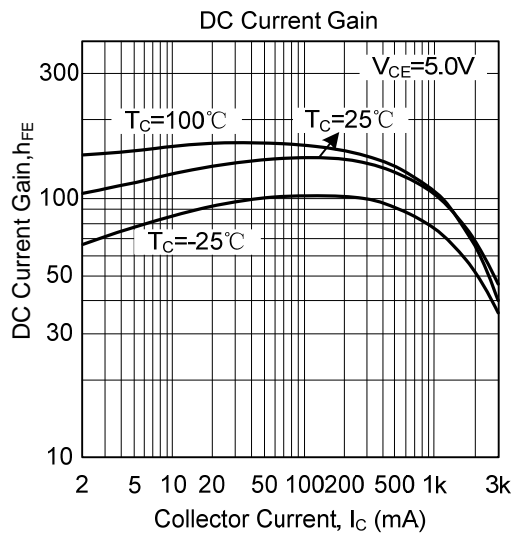
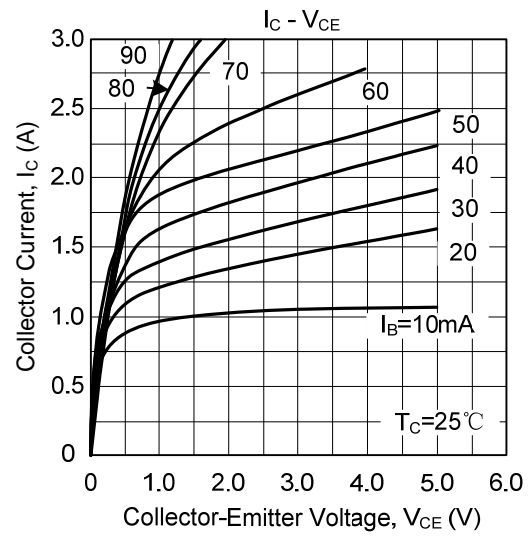
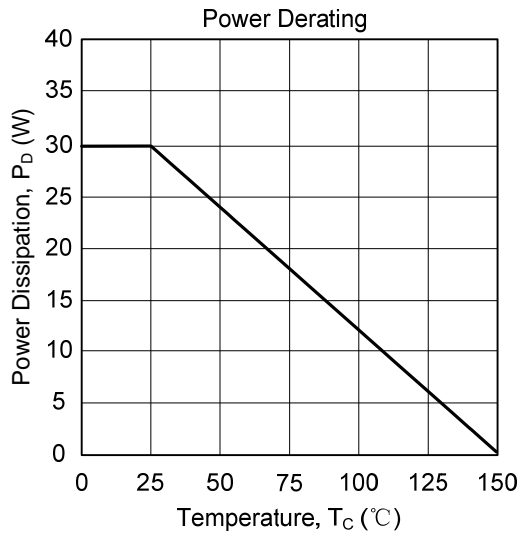
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

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

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

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	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=7\text{V}$ , $I_C=0$			100	$\mu\text{A}$
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



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