



2SD880

NPN SILICON TRANSISTOR

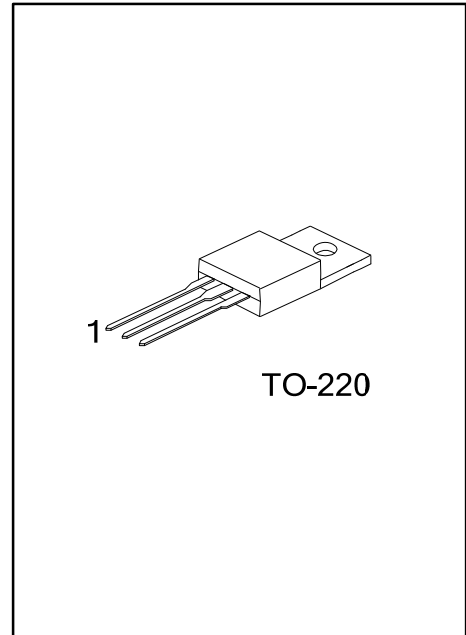
NPN EPITAXIAL TRANSISTOR

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: $V_{CE(\text{SAT})}=1.0V(\text{Max.})(I_C=3A, I_B=0.3A)$
- * High Power Dissipation: $P_C=30W (T_C=25^\circ\text{C})$
- * 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> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Lead Free</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220</p> <p>(3) G: Halogen Free, L: Lead Free</p>
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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 (Derate at $T_C > 25^\circ\text{C}$)		P_D	30	W
Junction Temperature	$T_A=25$	T_J	1.5	W
	$T_C=25$		30	
Storage Temperature		T_{STG}	-55~+150	$^\circ\text{C}$

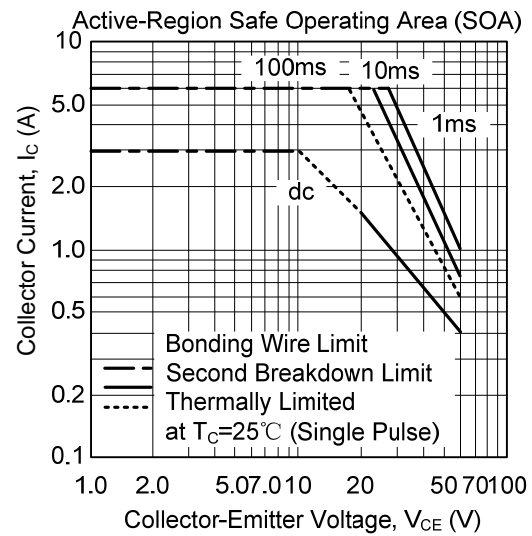
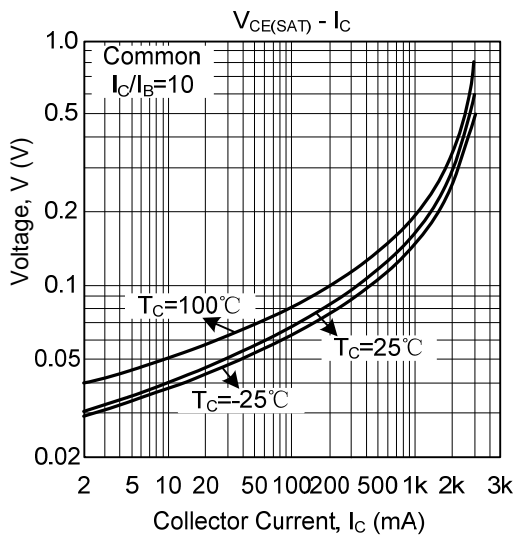
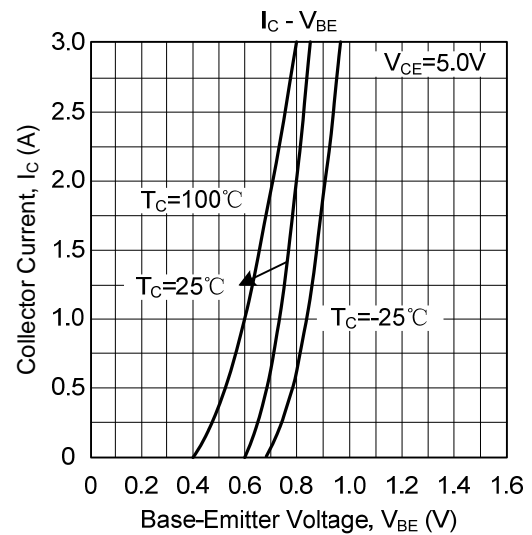
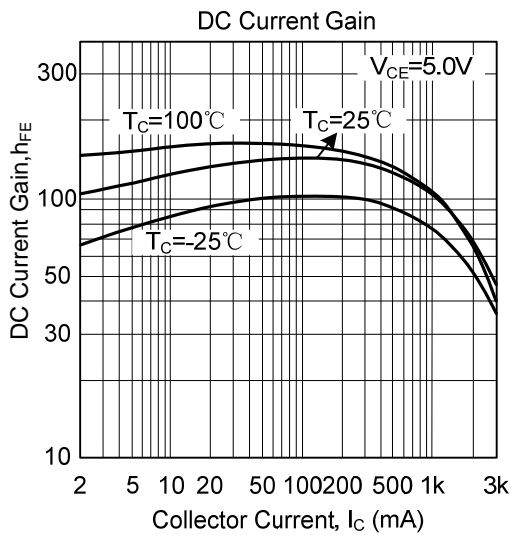
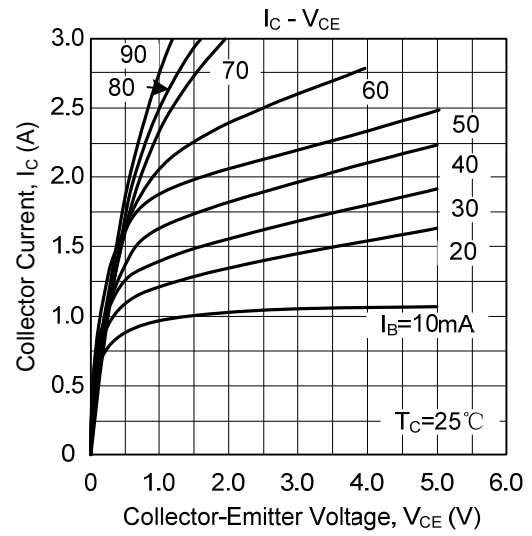
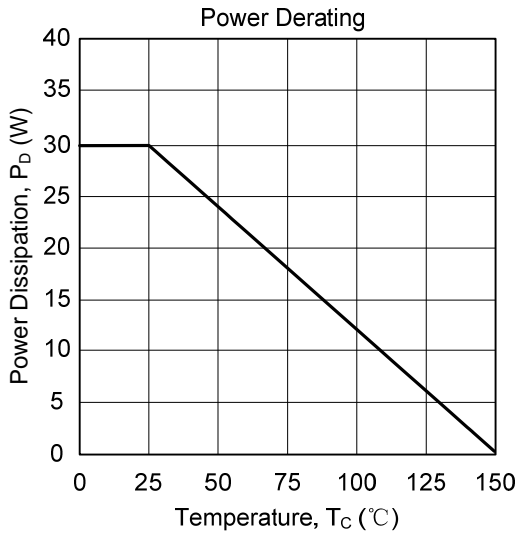
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

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	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



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