# UNISONIC TECHNOLOGIES CO., LTD

## 2SD880

## NPN SILICON TRANSISTOR

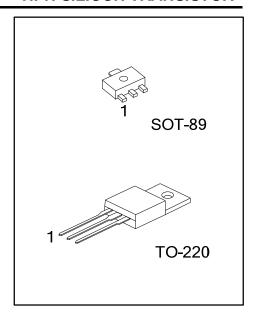
## NPN EPITAXIAL TRANSISTOR

#### **DESCRIPTION**

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

#### **FEATURES**

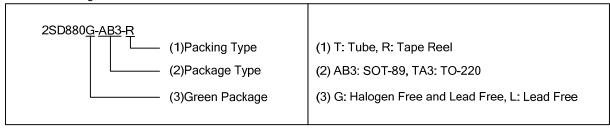
- \* High DC Current Gain:  $h_{FE}=200(Max.)(V_{CE}=5V, I_{C}=0.5A)$
- \* Low Saturation Voltage: V<sub>CE(SAT)</sub>=1.0V(Max.)(I<sub>C</sub>=3A, I<sub>B</sub>=0.3A)
- \* Complementary to 2SB834



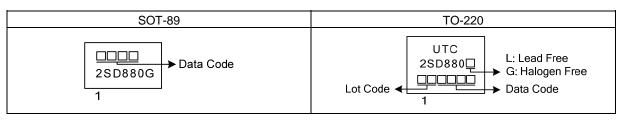
#### ORDERING INFORMATION

Orderin	Deelsess	Pin Assignment			Da aldia a		
Lead Free	Halogen Free	Package	1	2	3	Packing	
-	2SD880G-AB3-R	SOT-89	В	С	Е	Tube	
2SD880L-TA3-T	2SD880G-TA3-T	TO-220	В	С	Е	Tube	

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



#### **MARKING**



Gwww.flying1688.com www.unisonic.com.tw 1 of 4 QW-R203-013.G

### ■ **ABSOLUTE MAXIMUM RATINGS** (T<sub>A</sub> =25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT	
Collector to Base Voltage		$V_{CBO}$	60	V	
Collector to Emitter Voltage		$V_{\sf CEO}$	60	V	
Emitter to Base Voltage		$V_{EBO}$	7	<b>V</b>	
Collector Current		lc	3	Α	
Base Current		l <sub>Β</sub>	0.5	Α	
Power Dissipation	SOT-89	P <sub>D</sub>	0.55	10/	
	TO-220 T <sub>A</sub> =25		1.5		
	SOT-89		3	W	
	TO-220 T <sub>C</sub> =25		30		
Junction Temperature		T <sub>J</sub>	150	W	
Storage Temperature		$T_{STG}$	-55~+150	°C	

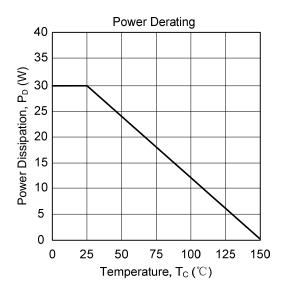
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

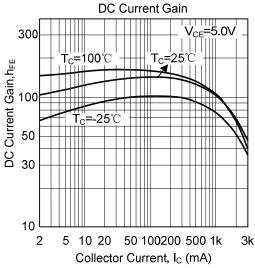
## ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub> =25°C, unless otherwise specified)

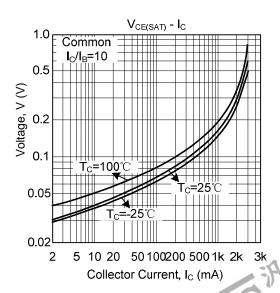
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> =50mA, I <sub>E</sub> =0	60			V
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0			100	μΑ
Emitter Cut-Off Current	I <sub>EBO</sub>	$V_{EB}=7V$ , $I_{C}=0$			100	μΑ
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	I <sub>C</sub> =3A, I <sub>B</sub> =300mA			1	V
Base-Emitter Saturation Voltage	$V_{BE(ON)}$	V <sub>CE</sub> =5V, I <sub>C</sub> =500mA			1	V
DC Current Gain	h <sub>FE</sub>	I <sub>C</sub> =500mA, V <sub>CE</sub> =5V	100		200	
Current gain bandwidth product	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =500mA		3		MHZ

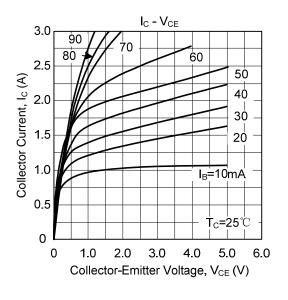


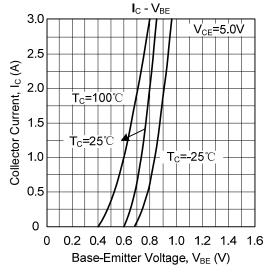
#### ■ TYPICAL CHARACTERISTICS

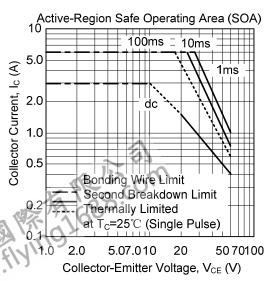












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