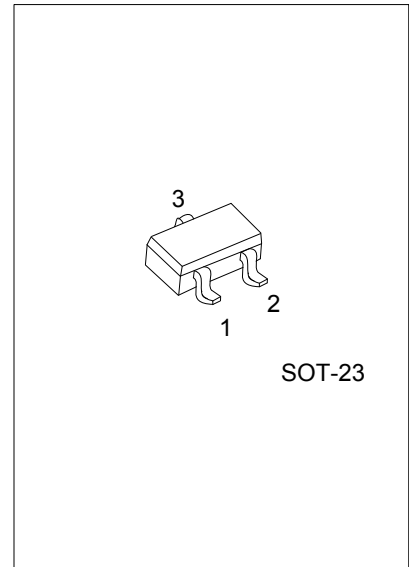




## 2SC1623

## NPN SILICON TRANSISTOR

AUDIO FREQUENCY GENERAL  
PURPOSE AMPLIFIER NPN  
SILICON TRANSISTOR MINI  
MOLD



### DESCRIPTION

The UTC **2SC1623** is a NPN silicon transistor using UTC's advanced technology to provide customers with high DC current gain and high breakdown voltage.

The UTC **2SC1623** is usually used in audio frequency general purpose amplifier.

### FEATURES

- \* High breakdown Voltage
- \* High DC Current Gain

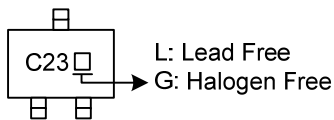
### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC1623L-xx-AE3-R	2SC1623G-xx-AE3-R	SOT-23	B	E	C	Tape Reel

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

<p>2SC1623G-xx-AE3-R</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Green Package</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23 (3) xx: refer to Classification of <math>h_{FE}</math> (4) G: Halogen Free and Lead Free, L: Lead Free</p>
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### MARKING



■ 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	$V_{CEO}$	50	V
Emitter to Base Voltage	$V_{EBO}$	5.0	V
Collector Current (DC)	$I_C$	100	mA
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	+150	$^\circ\text{C}$
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 ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

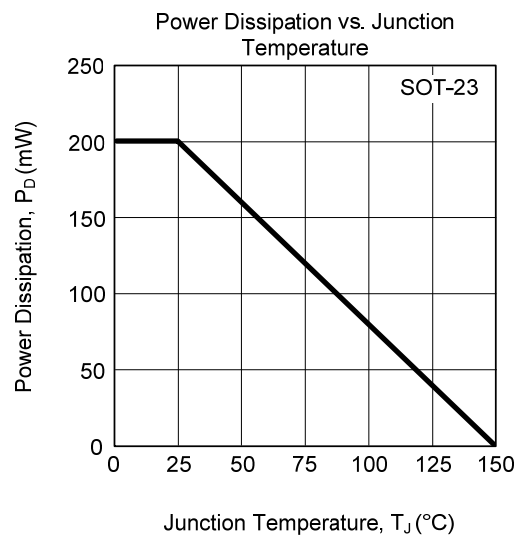
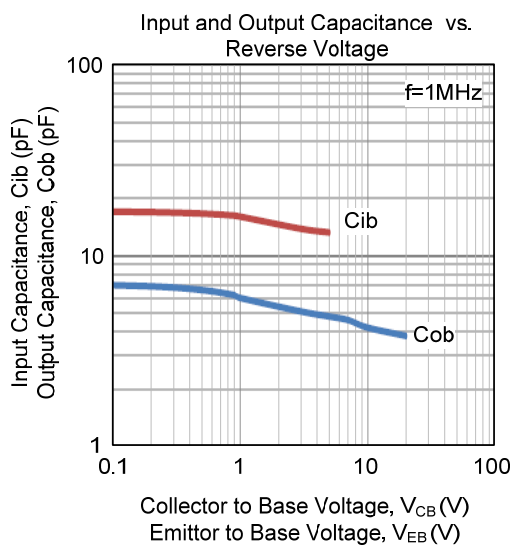
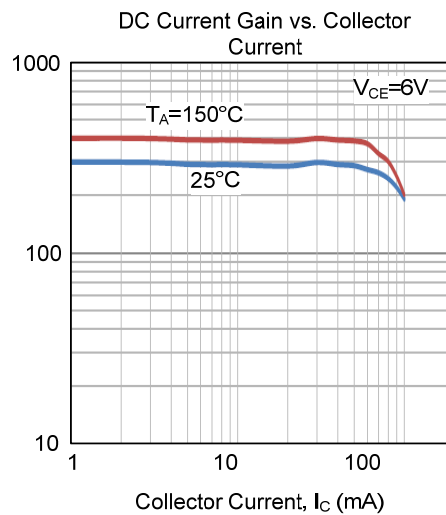
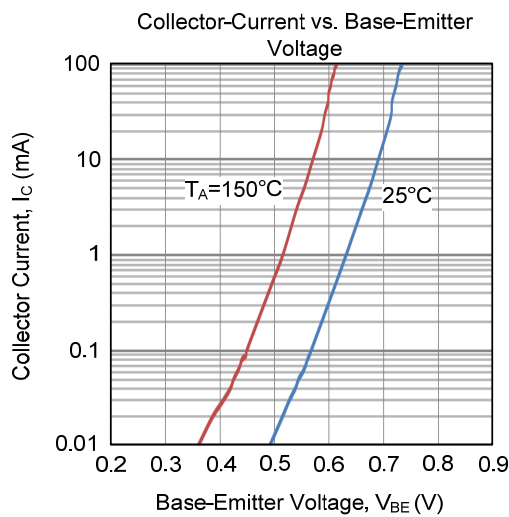
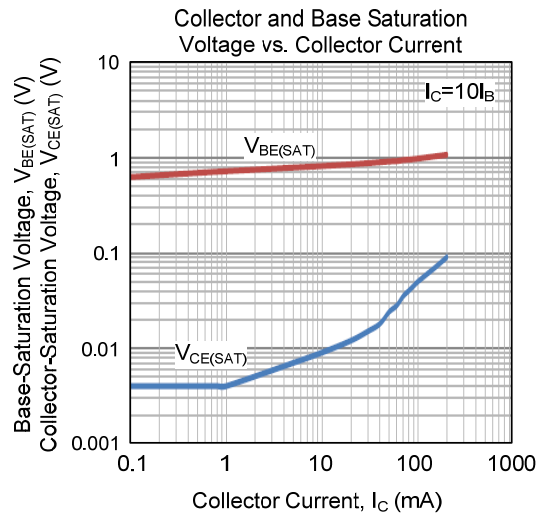
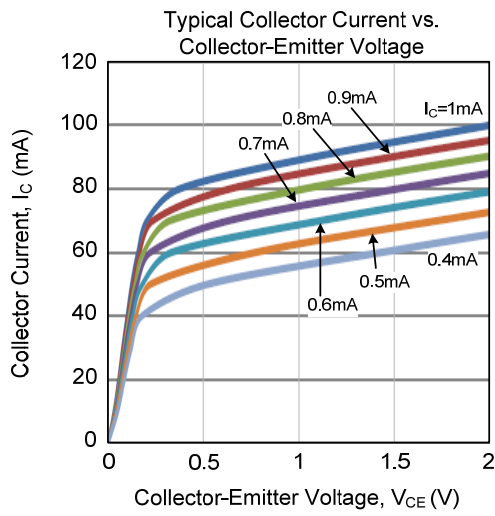
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=60\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=5.0\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=6.0\text{V}, I_C=1.0\text{mA}$ (Note 1)	90		600	
Collector Saturation Voltage	$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$ (Note 1)			0.3	V
Base to Saturation Voltage	$V_{BE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$ (Note 1)			1.0	V
Base Emitter Voltage	$V_{BE}$	$V_{CE}=6.0\text{V}, I_C=1.0\text{mA}$ (Note 1)	0.55		0.7	V
Gain Bandwidth Product	$f_T$	$V_{CE}=6.0\text{V}, I_E=-10\text{mA}$		250		MHz
Output Capacitance	$C_{OB}$	$V_{CB}=6.0\text{V}, I_E=0, f=1.0\text{MHz}$		3.0		pF

Note: Pulsed:  $P_W \leq 350\mu\text{s}$ , Duty Cycle  $\leq 2\%$ .

■ CLASSIFICATION OF  $h_{FE}$

RANK	L4	L5	L6	L7
RANGE	90 ~ 180	135 ~ 270	200 ~ 400	300 ~ 600

## TYPICAL CHARACTERISTICS



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