



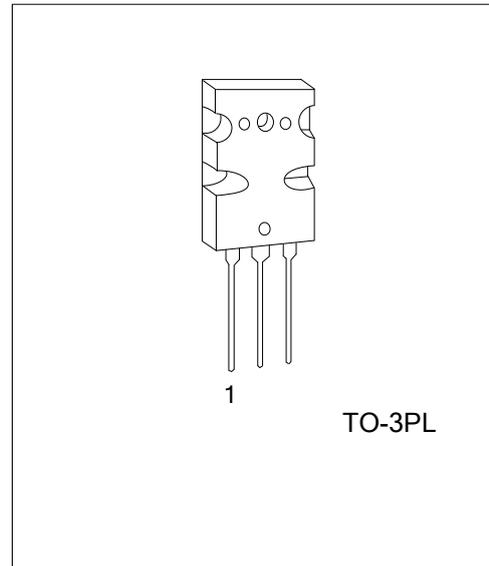
2SA1943

PNP SILICON TRANSISTOR

POWER AMPLIFIER APPLICATIONS

FEATURES

- * Complementary to UTC **2SC5200**
- * Recommended for 100W High Fidelity Audio Frequency Amplifier Output Stage



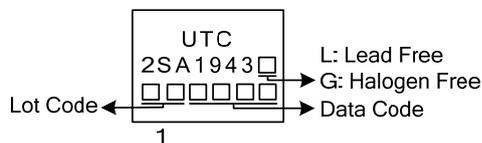
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SA1943L-x-T3L-T	2SA1943G-x-T3L-T	TO-3PL	B	C	E	Tube

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

<p>2SA1943L-x-T3L-T</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Green Package</p>	<p>(1) T: Tube (2) T3L: TO-3PL (3) x: refer to Classification of h_{FE} (4) L: Lead Free, G: Halogen Free and Lead Free</p>
---	--

MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-230	V
Collector-Emitter Voltage	V_{CEO}	-230	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-15	A
Base Current	I_B	-1.5	A
Collector Power Dissipation ($T_C=25^\circ\text{C}$)	P_C	150	W
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 ~ +125	$^\circ\text{C}$

Note: 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. The device is guaranteed to meet performance specification within $0^\circ\text{C} \sim 70^\circ\text{C}$ operating temperature range and assured by design from $-20^\circ\text{C} \sim 85^\circ\text{C}$

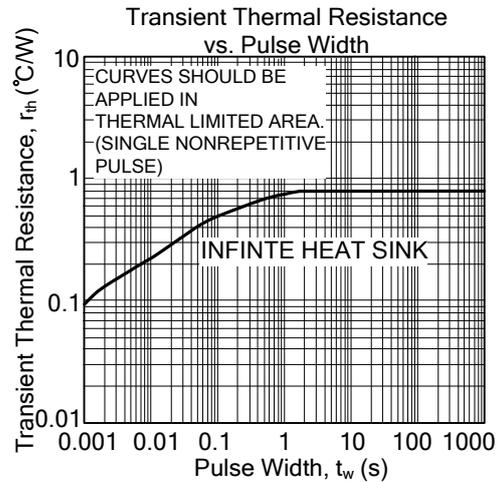
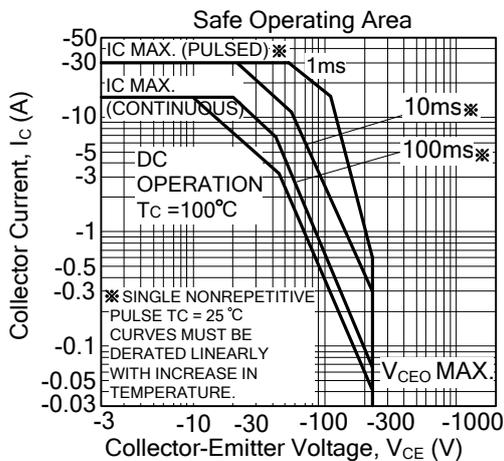
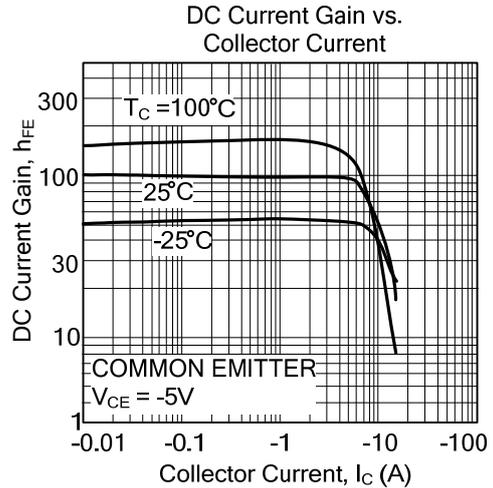
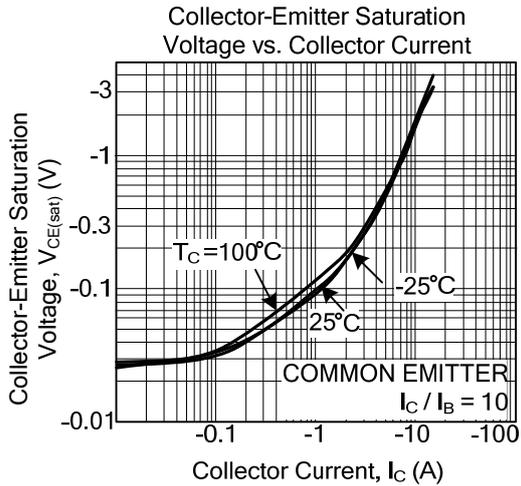
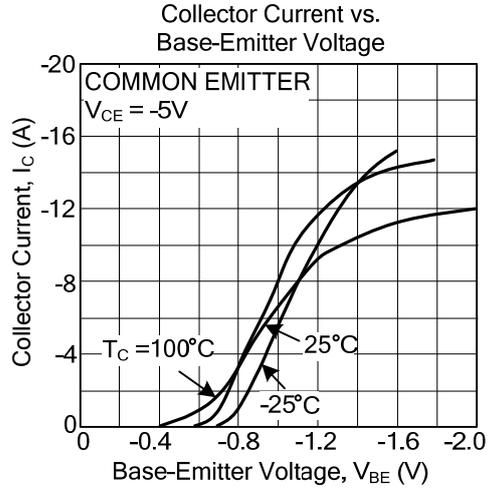
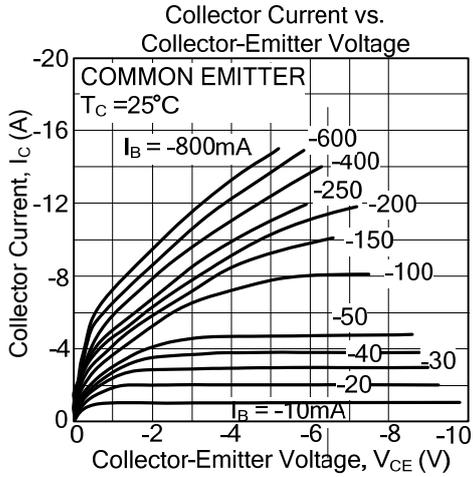
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -230\text{V}, I_E=0$			-5.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -5\text{V}, I_C=0$			-5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50\text{mA}, I_B=0$	-230			V
DC Current Gain	h_{FE}	$V_{CE} = -5\text{V}, I_C = -1\text{A}$	55		160	
	h_{FE}	$V_{CE} = -5\text{V}, I_C = -7\text{A}$	35	60		
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -8\text{A}, I_B = -0.8\text{A}$		-1.5	-3.0	V
Base -Emitter Voltage	V_{BE}	$V_{CE} = -5\text{V}, I_C = -7\text{A}$		-1.0	-1.5	V
Transition Frequency	f_T	$V_{CE} = -5\text{V}, I_C = -1\text{A}$		30		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E=0, f=1\text{MHz}$		360		pF

■ CLASSIFICATION OF h_{FE}

Rank	R	O
Range	55 ~ 110	80 ~ 160

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. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.