



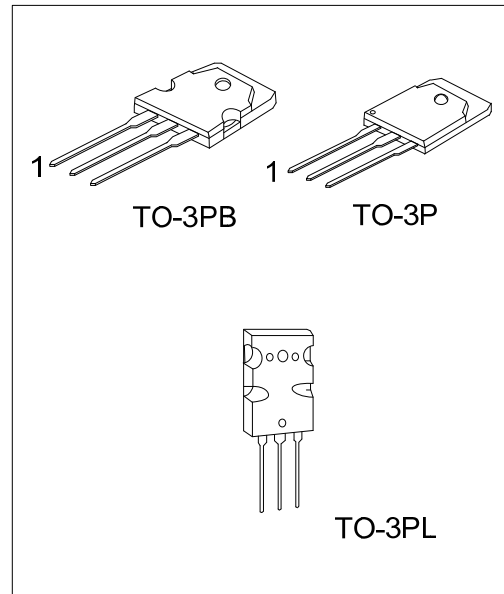
# 2SA1943

## PNP SILICON TRANSISTOR

### POWER AMPLIFIER APPLICATIONS

■ FEATURES

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



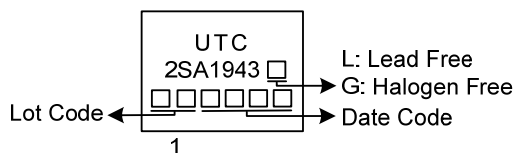
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SA1943L-x-T3P-T	2SA1943G-x-T3P-T	TO-3P	B	C	E	Tube
2SA1943L-x-T3B-T	2SA1943G-x-T3B-T	TO-3PB	B	C	E	Tube
2SA1943L-x-T3L-T	2SA1943G-x-T3L-T	TO-3PL	B	C	E	Tube

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

<p>2SA1943G-x-T3P-T</p>	<p>(1) T: Tube                  (2) T3P: TO-3P, T3B: TO-3PB, T3L: TO-3PL                  (3) Rrefer to CLASSIFICATION OF <math>h_{FE1}</math>                  (4) G: Halogen Free and Lead Free, L: 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: 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.

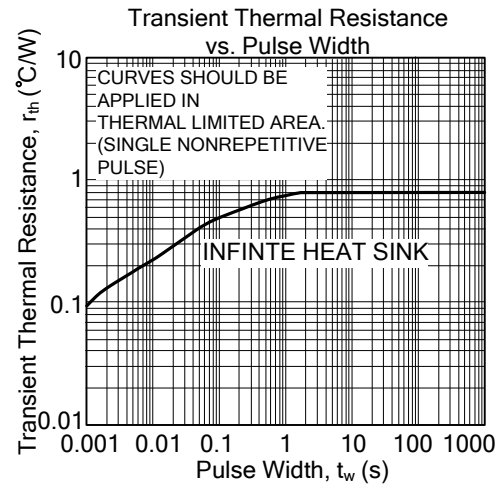
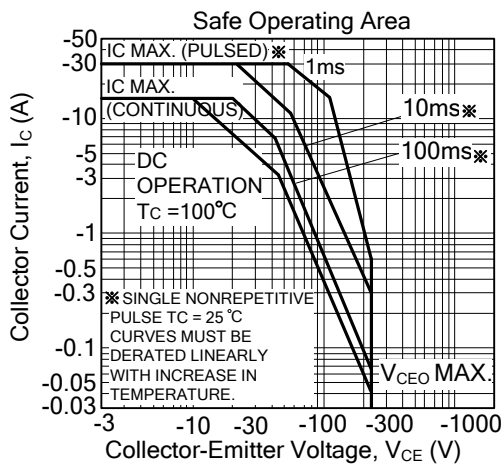
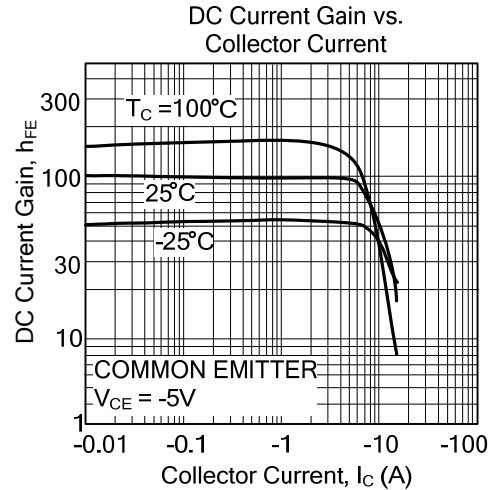
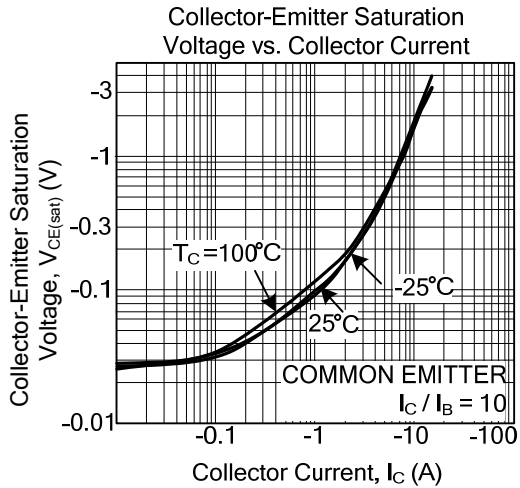
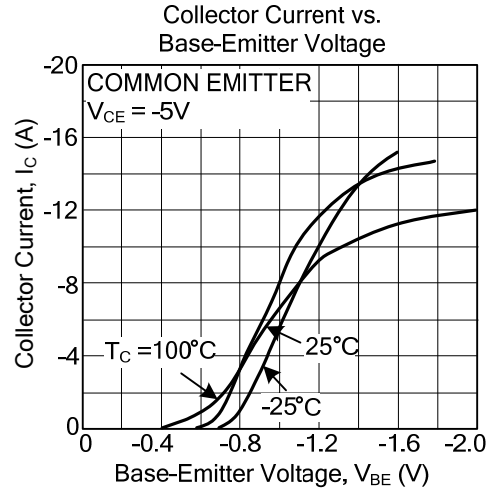
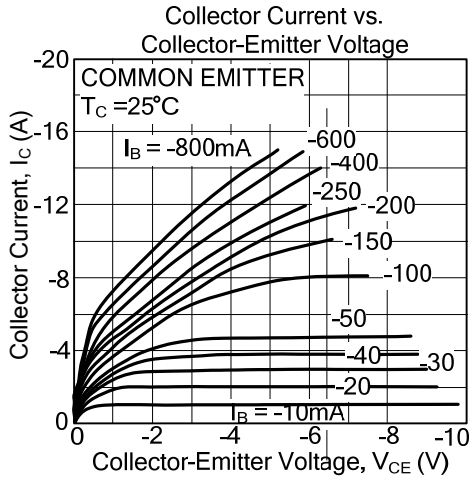
■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = -230\text{V}, I_E=0$			-5.0	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C=0$			-5.0	$\mu\text{A}$
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. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.