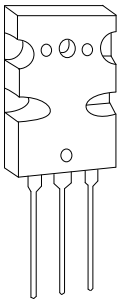
2SA1943

PNP SILICON TRANSISTOR

POWER AMPLIFIER APPLICATIONS



TO-3PL

■ 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 Plating	Halogen Free	TO-3PL	1	2	3	Tube
2SA1943L-T3L-T	2SA1943G-T3L-T		B	C	E	

2SA1943L-T3L-T
(1)Packing Type
(2)Package Type
(3)Lead Plating

(1) T: Tube
(2) T3L: TO-3PL
(3) L: Lead Free Plating, G: Halogen Free

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■ ABSOLUTE MAXIMUM RATING (T_C = 25℃)

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 (Tc=25℃)	P_C	150	W
Junction Temperature	T_J	0 ~ +125	℃
Storage Temperature Range	T_{STG}	-65 ~ +125	℃

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℃~70℃ operating temperature range and assured by design from –20℃~85℃

■ ELECTRICAL CHARACTERISTICS (Ta=25℃)

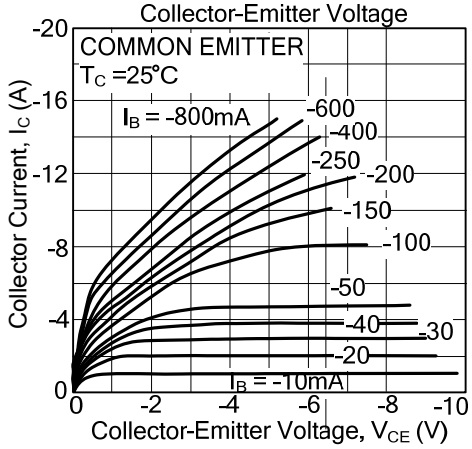
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	V_{CB} = -230V, I_E=0			-5.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}= -5V, I_C=0			-5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)\ CEO}$	I_C= -50mA, I_B=0	-230			V
DC Current Gain	h_{FE}	V_{CE}= -5V, I_C= -1A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

■ CLASSIFICATION OF h_{FE}

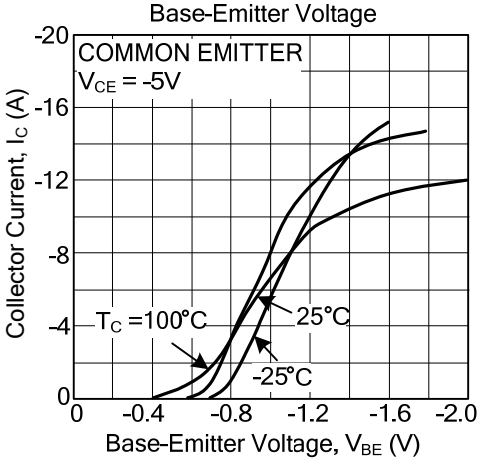
Rank	R	O
Range	55 ~ 110	80 ~ 160

■ TYPICAL CHARACTERISTICS

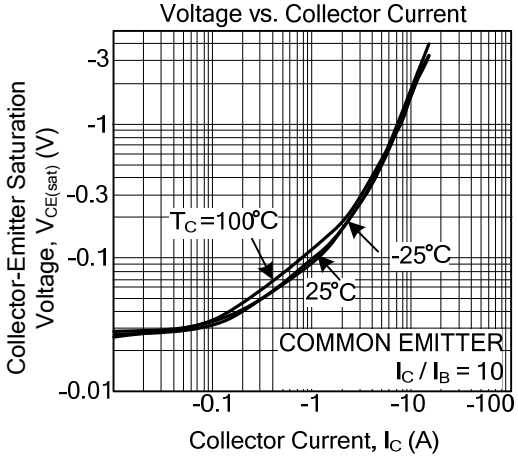
Collector Current vs. Collector-Emitter Voltage



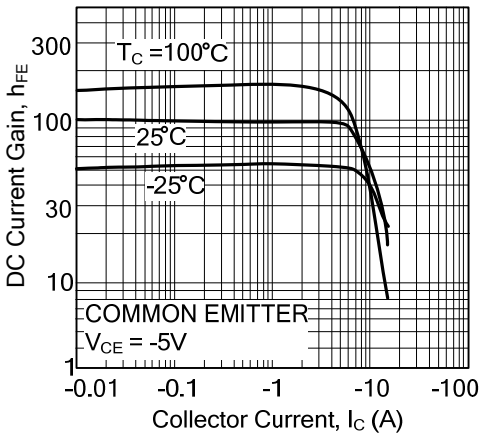
Collector Current vs. Base-Emitter Voltage



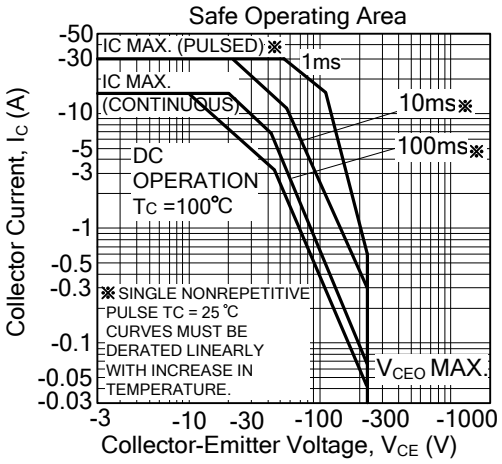
Collector-Emitter Saturation Voltage vs. Collector Current



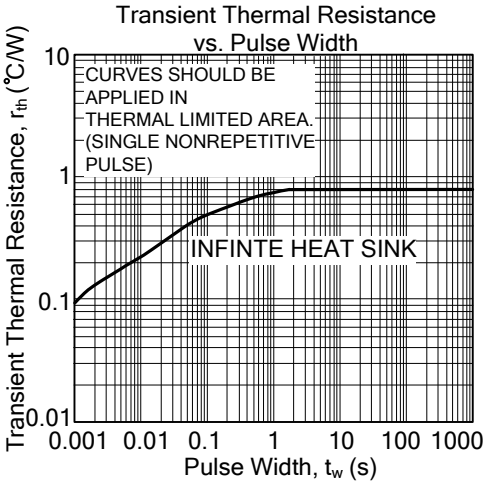
DC Current Gain vs. Collector Current



Safe Operating Area



Transient Thermal Resistance vs. Pulse Width



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