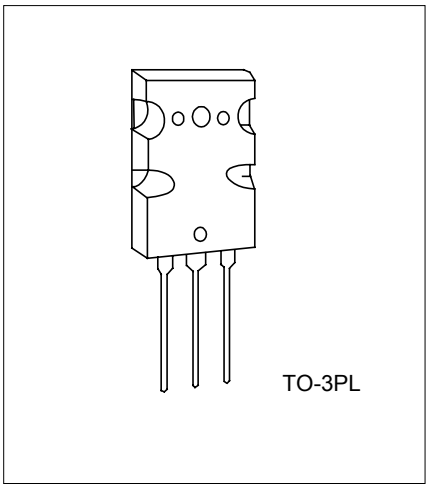
UTC 2SA1943 PNP EPITAXIAL SILICON TRANSISTOR

POWER AMPLIFIER APPLICATIONS



1:BASE 2:COLLECTOR 3:EMITTER
*Pb-free plating product number:2SA1943L

FEATURES

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

ABSOLUTE MAXIMUM RATINGS

(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	℃

ELECTRICAL CHARACTERISTICS

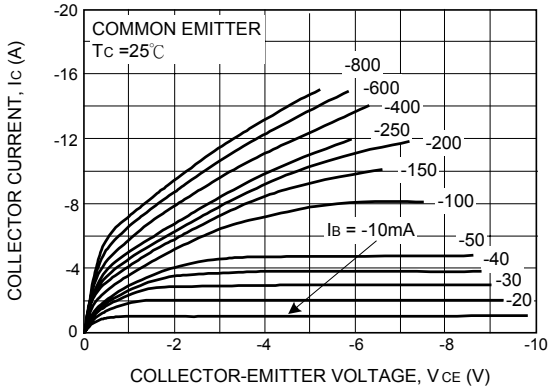
(Ta=25℃)

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	$h_{FE\ (1)\ (Note)}$	V_{CE}= -5V, I_C= -1A	55		160	
	$h_{FE\ (2)}$	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	fT	V_{CE}= -5V, I_C= -1A		30		MHz
Collector Output Capacitance	Cob	V_{CB}= -10V, I_E=0, f=1MHz		360		pF

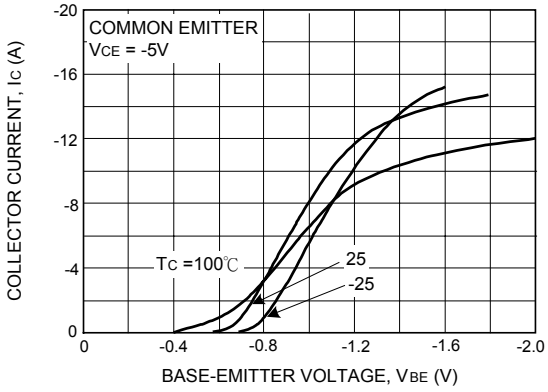
Note: h_{FE} (1) Classification, R : 55 ~ 110, O : 80 ~ 160

TYPICAL CHARACTERISTICS

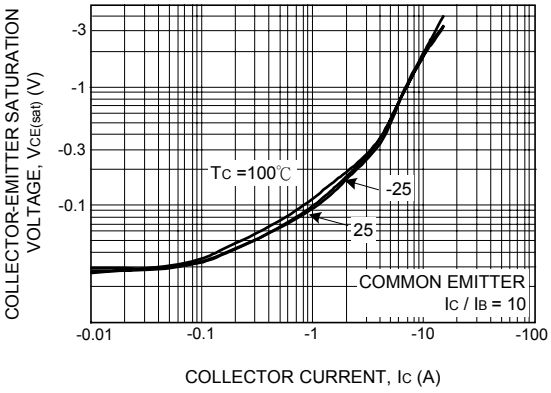
I_C - V_{CE}



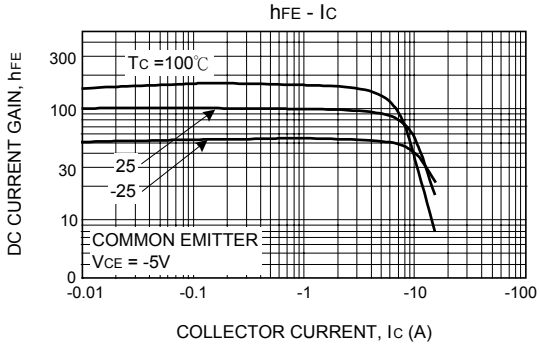
I_C - V_{BE}



$V_{CE(sat)}$ - I_C



h_{FE} - I_C



SAFE OPERATING AREA