



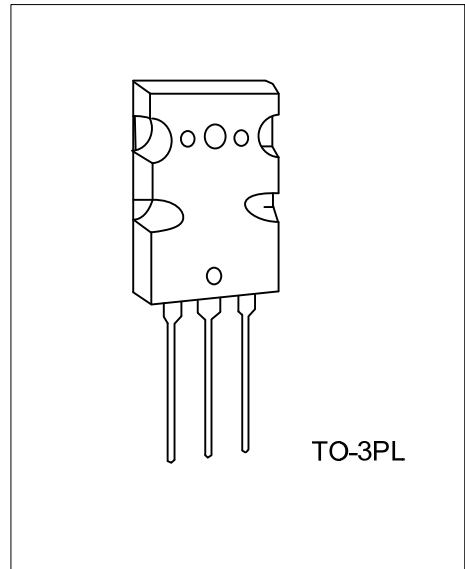
2SC5200

NPN EPITAXIAL SILICON TRANSISTOR

POWER AMPLIFIER APPLICATIONS

■ FEATURES

- * Recommended for 100W High Fidelity Audio Frequency Amplifier Output Stage.
- * Complementary to UTC 2SA1943



■ ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC5200-x-T3L-T	2SC5200-x-T3L-T	TO-3PL	B	C	E	Tube

<p>2SC5200L-x-T3L-T</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Rank</p> <p>(4) Lead Free</p>	<p>(1) T: Tube</p> <p>(2) T3L: TO-3PL</p> <p>(3) L refer to CLASSIFICATION OF h_{FE1}</p> <p>(4) L: Lead Free, G: Halogen Free</p>
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■ ABSOLUTE MAXIMUM RATING ($T_C=25^\circ\text{C}$)

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}	-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.

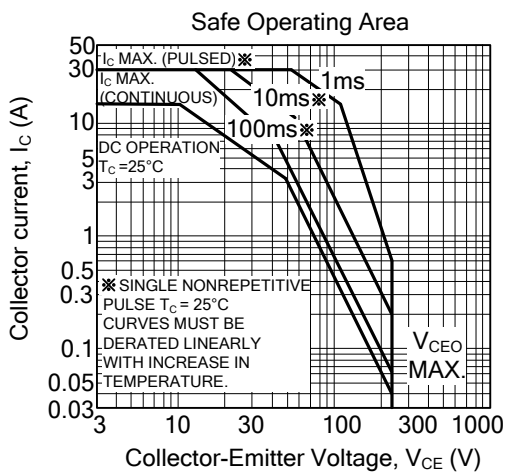
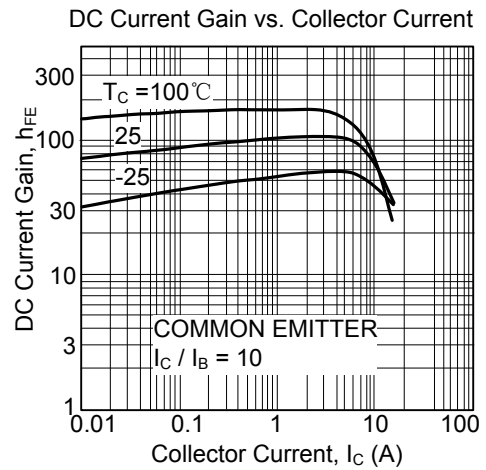
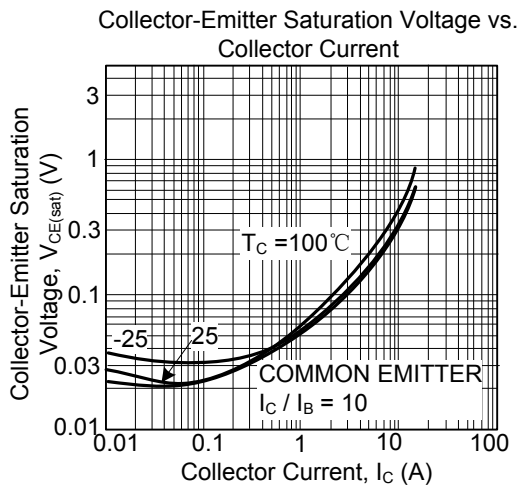
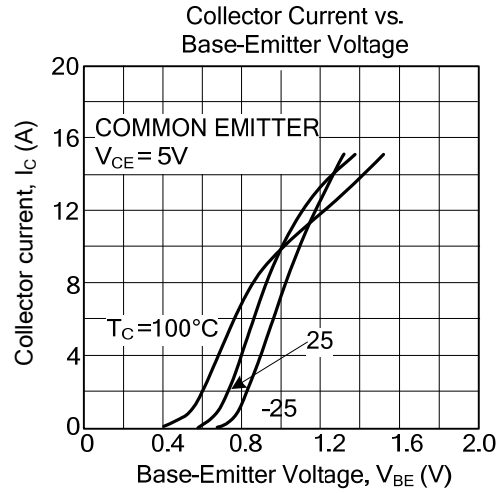
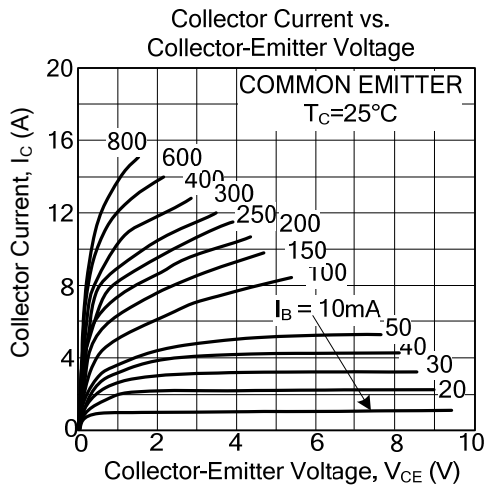
■ ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}, I_B=0$	230			V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=8\text{A}, I_B=0.8\text{A}$		0.4	3.0	V
Base -Emitter Voltage	V_{BE}	$V_{CE}=5\text{V}, I_C=7\text{A}$		1.0	1.5	V
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
DC Current Gain	h_{FE1}	$V_{CE}=5\text{V}, I_C=1\text{A}$	55		160	
	h_{FE2}	$V_{CE}=5\text{V}, I_C=7\text{A}$	35	60		
Transition Frequency	f_T	$V_{CE}=5\text{V}, I_C=1\text{A}$		30		MHz
Collector Output Capacitance	C_{OB}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		200		pF

■ CLASSIFICATION OF h_{FE1}

RANK	R	O
Range	55 ~ 110	80 ~ 160

■ TYPICAL CHARACTERISTICS



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