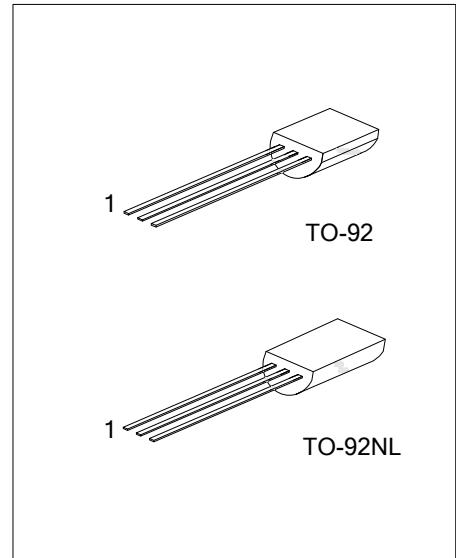




# 2SC2235

## NPN SILICON TRANSISTOR

AUDIO POWER AMPLIFIER  
 APPLICATIONS DRIVER STAGE  
 AMPLIFIER APPLICATIONS



■ FEATURES

\* Complimentary to UTC 2SA965

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC2235L-x-T92-B	2SC2235G-x-T92-B	TO-92	E	C	B	Tape Box
2SC2235L-x-T92-K	2SC2235G-x-T92-K	TO-92	E	C	B	Bulk
2SC2235L-x-T9N-B	2SC2235G-x-T9N-B	TO-92NL	E	C	B	Tape Box
2SC2235L-x-T9N-K	2SC2235G-x-T9N-K	TO-92NL	E	C	B	Bulk

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

<p>2SC2235L-x-T92-B</p>	<p>(1) Packing Type          (2) Package Type          (3) Rank          (4) Green Package</p>	<p>(1) B: Tape Box, K: Bulk          (2) T92: TO-92, T9N: TO-92NL          (3) x: refer to Classification of <math>h_{FE}</math>          (4) L: Lead Free, G: Halogen Free and Lead Free</p>
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■ MARKING

TO-92	TO-92NL

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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CB0}$	120	V
Collector-Emitter Voltage	$V_{CE0}$	120	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	800	mA
Emitter Current	$I_E$	-800	mA
Collector Power Dissipation	$P_C$	600	mW
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-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.

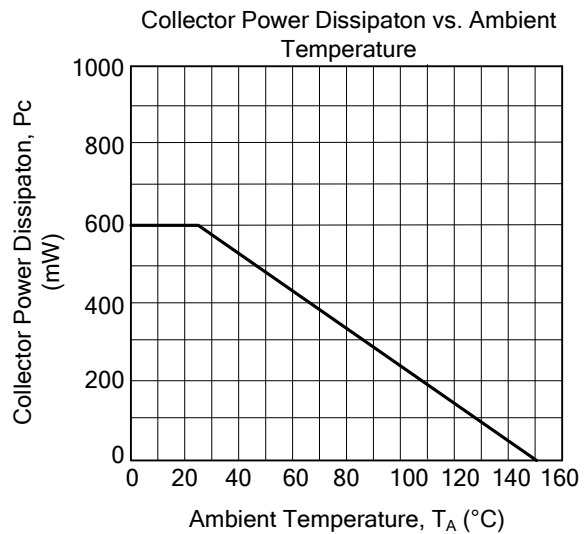
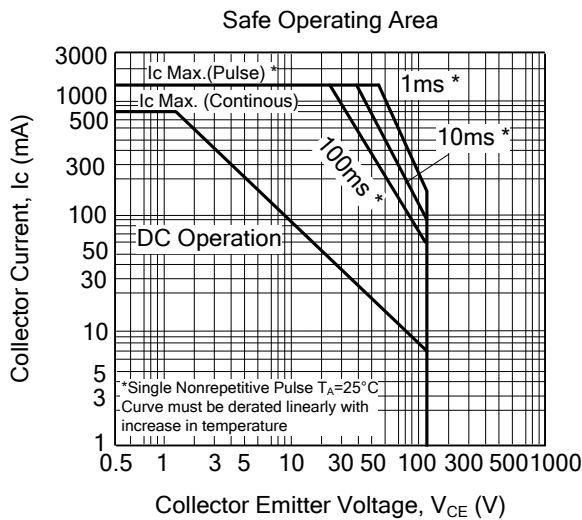
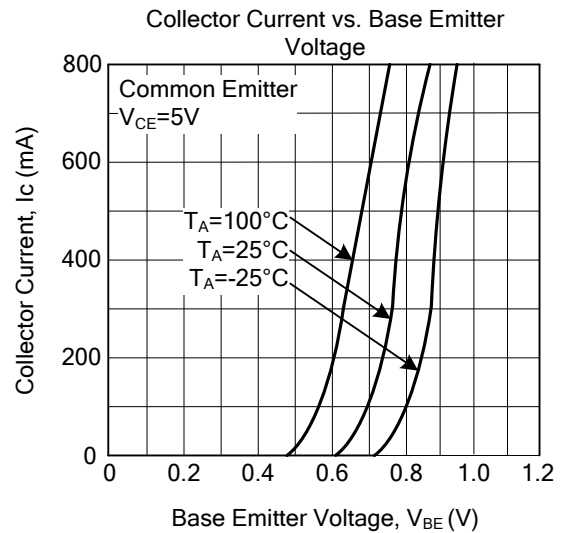
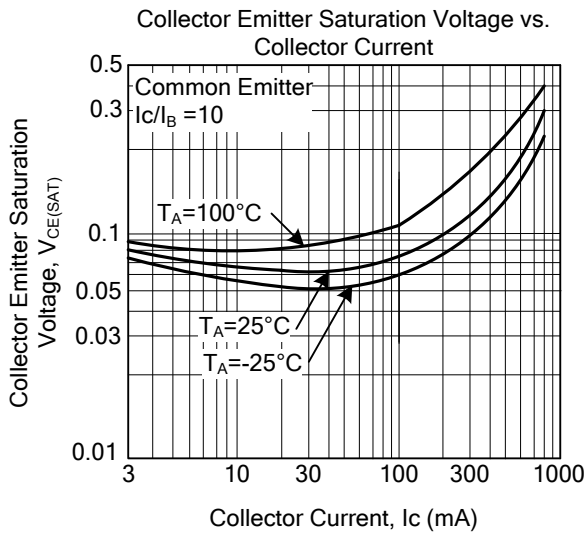
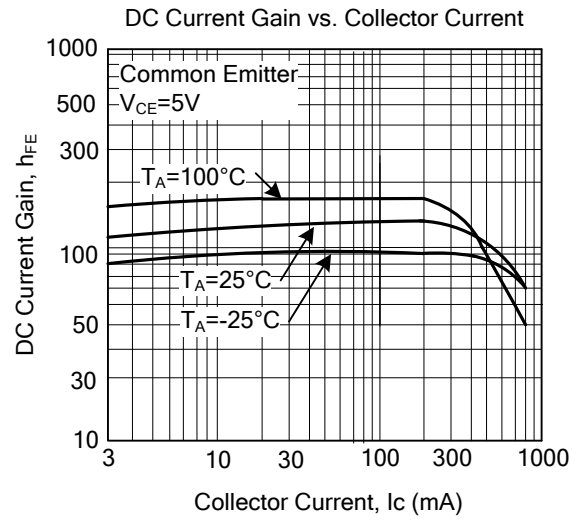
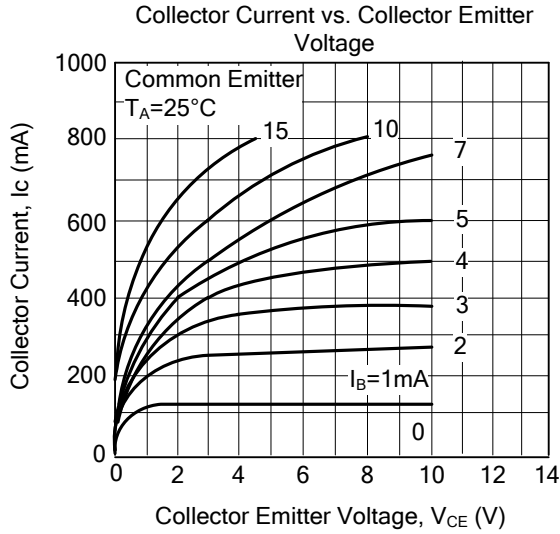
■ ELECTRICAL CHARACTERISTICS (  $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$V_{B_{CE0}}$	$I_C = 10\text{mA}, I_B = 0$	120			V
Emitter-Base Breakdown Voltage	$V_{B_{EBO}}$	$I_E = 1\text{mA}, I_C = 0$	5			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 120\text{V}, I_E = 0$			100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$			100	nA
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 100\text{mA}$	80		240	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$			1.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = 5\text{V}, I_C = 500\text{mA}$			1.0	V
Transition Frequency	$f_T$	$V_{CE} = 5\text{V}, I_C = 100\text{mA}$		120		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$			30	pF

■ CLASSIFICATION OF  $h_{FE}$

RANK	Y	O
RANGE	120-240	80-160

■ TYPICAL CHARACTERISTICS



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