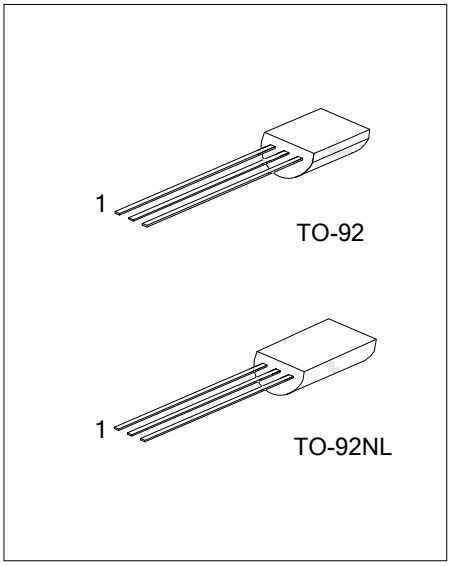
2SC2235

NPN SILICON TRANSISTOR

AUDIO POWER AMPLIFIER
APPLICATIONS DRIVER STAGE
AMPLIFIER APPLICATIONS



■ FEATURES

* Complimentary to UTC 2SA965

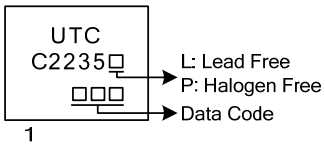
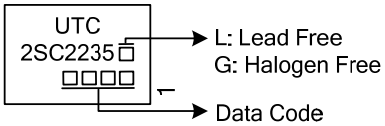
■ ORDERING INFORMATION

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

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

■ MARKING

TO-92	TO-92NL
	

■ ABSOLUTE MAXIMUM RATING (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	120	V
Collector-Emitter Voltage	V_{CEO}	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	°C
Storage Temperature	T_{STG}	-55 ~ +150	°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°C, unless otherwise specified)

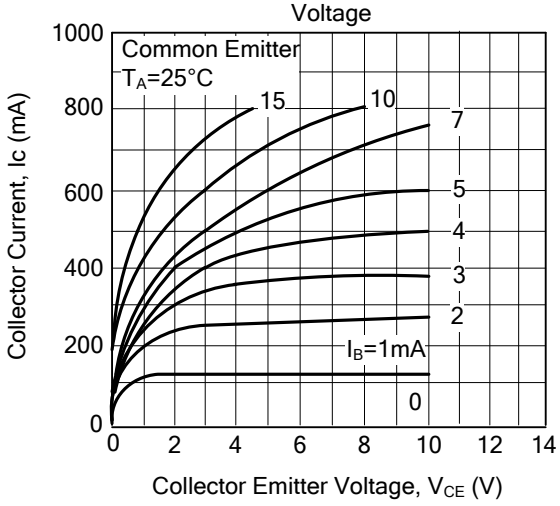
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	VB_{CEO}	I_C =10mA, I_B=0	120			V
Emitter-Base Breakdown Voltage	VB_{EBO}	I_E=1mA, I_C =0	5			V
Collector Cut-off Current	I_{CBO}	V_{CB}=120V, I_E=0			100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0			100	nA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

■ CLASSIFICATION OF h_{FE}

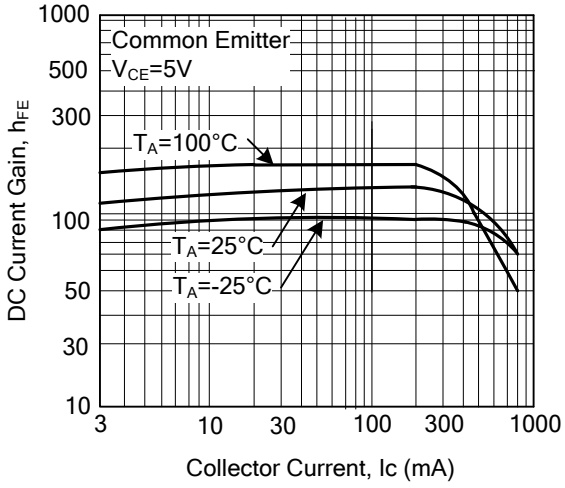
RANK	Y	O
RANGE	120-240	80-160

■ TYPICAL CHARACTERISTICS

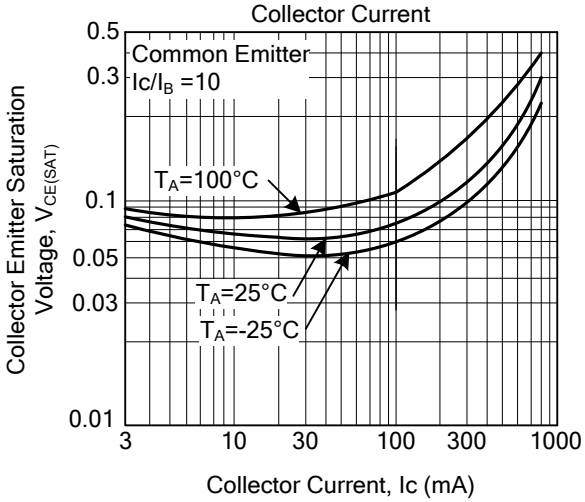
Collector Current vs. Collector Emitter Voltage



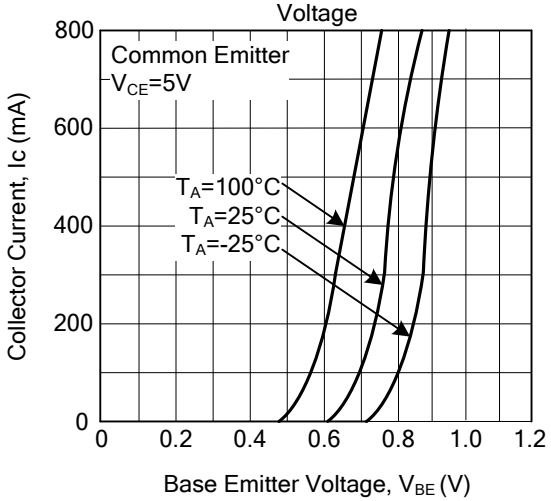
DC Current Gain vs. Collector Current



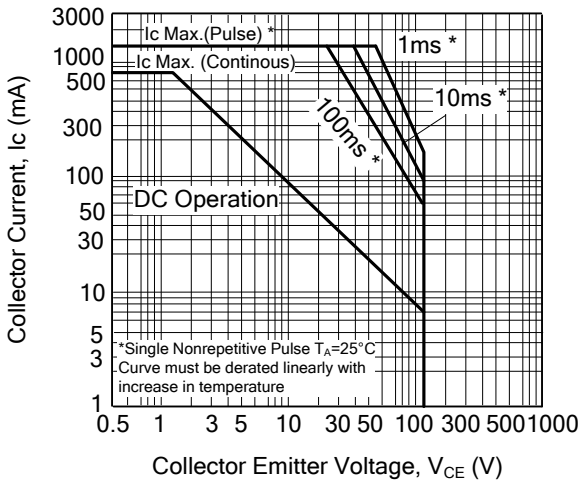
Collector Emitter Saturation Voltage vs. Collector Current



Collector Current vs. Base Emitter Voltage



Safe Operating Area



Collector Power Dissipaton vs. Ambient Temperature