# UTC UNISONIC TECHNOLOGIES CO., LTD

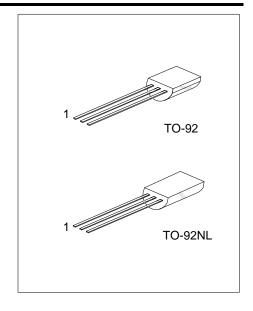
# 2SC2235

## NPN SILICON TRANSISTOR

# **AUDIO POWER AMPLIFIER** APPLICATIONS DRIVER STAGE AMPLIFIER APPLICATIONS

#### **FEATURES**

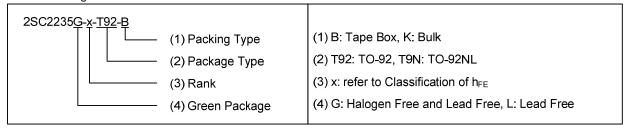
\* Complimentary to UTC 2SA965



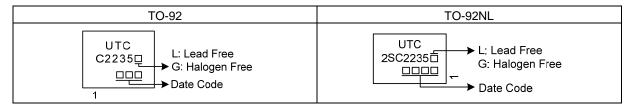
#### ORDERING INFORMATION

Ordering Number		Doolsons	Pin Assignment			Daakina	
Lead Free	Halogen Free	Package	1	2	3	Packing	
2SC2235L-x-T92-B	2SC2235G-x-T92-B	TO-92	Е	С	В	Tape Box	
2SC2235L-x-T92-K	2SC2235G-x-T92-K	TO-92	Е	С	В	Bulk	
2SC2235L-x-T9N-B	2SC2235G-x-T9N-B	TO-92NL	Е	С	В	Tape Box	
2SC2235L-x-T9N-K	2SC2235G-x-T9N-K	TO-92NL	Е	С	В	Bulk	

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



#### **MARKING**



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### ■ ABSOLUTE MAXIMUM RATING (T<sub>A</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V <sub>CBO</sub>	120	V
Collector-Emitter Voltage	V <sub>CEO</sub>	120	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	Ic	800	mA
Emitter Current	ΙE	-800	mA
Collector Power Dissipation	Pc	600	mW
Junction Temperature	TJ	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ <b>+</b> 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.

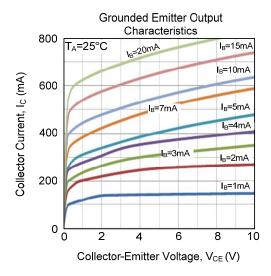
# ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, unless otherwise specified)

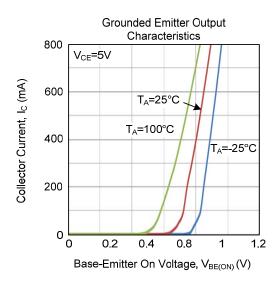
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	VB <sub>CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	120			V
Emitter-Base Breakdown Voltage	VB <sub>EBO</sub>	$I_E=1mA$ , $I_C=0$	5			V
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =120V, I <sub>E</sub> =0			100	nΑ
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			100	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA	80		240	
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	$I_C = 500 \text{mA}, I_B = 50 \text{mA}$			1.0	V
Base-Emitter Voltage	$V_{BE}$	V <sub>CE</sub> =5V, I <sub>C</sub> =500mA			1.0	V
Transition Frequency	f⊤	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA		120		MHz
Collector Output Capacitance	Cob	V <sub>CB</sub> =10V, I <sub>E</sub> =0,f=1MHz			30	pF

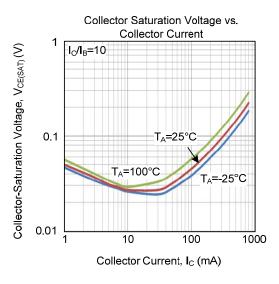
# ■ CLASSIFICATION OF h<sub>FE</sub>

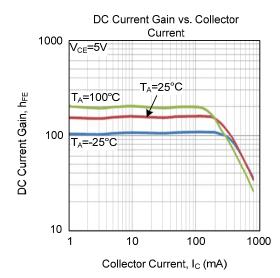
RANK	Y	0
RANGE	120-240	80-160

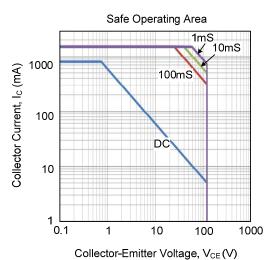
#### ■ TYPICAL CHARACTERISTICS











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