

# 2SC2320

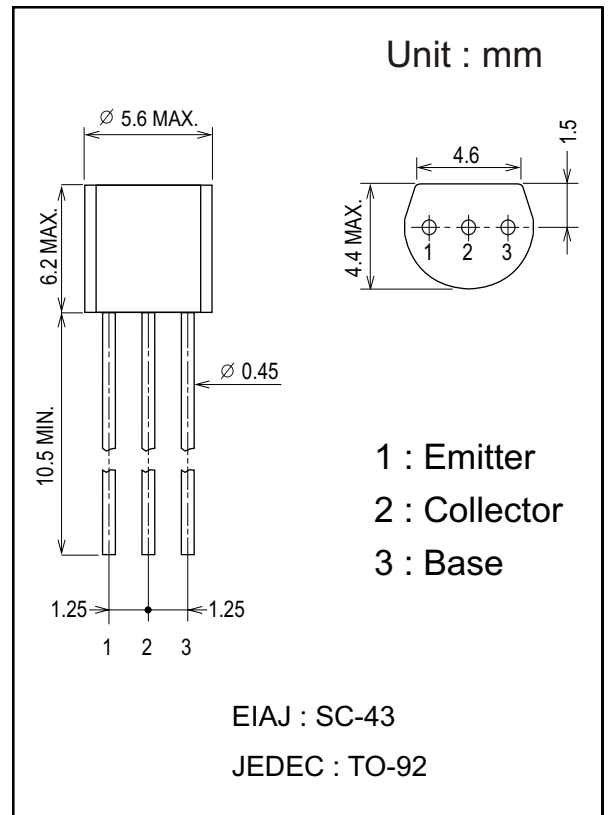
Audio Frequency Voltage Amplifier Applications  
Low Noise Amplifier Applications

NPN Epitaxial Planar Silicon Transistor

Excellent hFE Linearity  
Complementary to 2SA999

## MAXIMUM RATINGS (Ta = 25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	50	V
Emitter-Base Voltage	V <sub>EB0</sub>	6	V
Collector-Emitter Voltage	V <sub>CEO</sub>	50	V
Collector Current	I <sub>c</sub>	200	mA
Collector Power Dissipation	P <sub>c</sub>	300	mW
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	T <sub>stg</sub>	-55~+125	°C



## ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> = 100μA, R <sub>BE</sub> = ∞	50			V
Collector Cut-off current	I <sub>cBO</sub>	V <sub>CB</sub> = 50V, I <sub>E</sub> = 0			0.1	μA
Emitter Cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 6V, I <sub>c</sub> = 0			0.1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 6V, I <sub>c</sub> = 1mA	90		800	
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 6V, I <sub>c</sub> = 0,1mA	50			
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = 100mA, I <sub>B</sub> = 10mA			0.3	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 6V, I <sub>E</sub> = 10mA		200		MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 6V, I <sub>E</sub> = 0, f = 1MHz		3,5		pF
Noise Figure	NF	V <sub>CE</sub> = 6V, I <sub>E</sub> = 0,3mA f = 100Hz, R <sub>G</sub> = 10kΩ			2	dB

hFE Rank classification :

Rank	D	E	F	G
hFE	90~180	150~300	250~500	400~800

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