

2SC2320

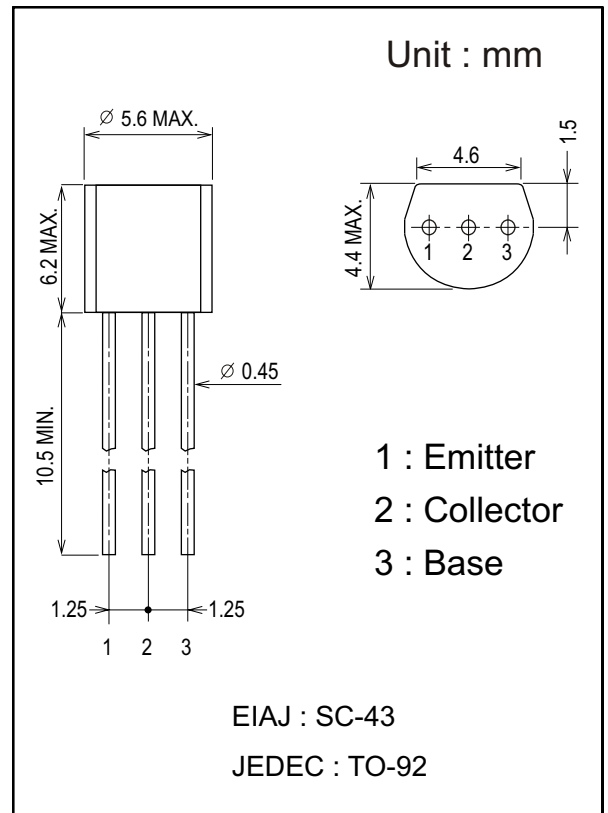
Audio Frequency Voltage Amplifier Applications
Low Noise Amplifier Applications

NPN Epitaxial Planar Silicon Transistor

Excellent h_{FE} Linearity
Complementary to 2SA999

MAXIMUM RATINGS ($T_a = 25\text{ }^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	50	V
Emitter-Base Voltage	V_{EB0}	6	V
Collector-Emitter Voltage	V_{CE0}	50	V
Collector Current	I_c	200	mA
Collector Power Dissipation	P_c	300	mW
Junction Temperature	T_j	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55~+125	$^{\circ}\text{C}$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_c = 100\mu\text{A}$, $R_{BE} = \infty$	50			V
Collector Cut-off current	I_{CBO}	$V_{CB} = 50\text{V}$, $I_E = 0$			0.1	μA
Emitter Cut-off current	I_{EBO}	$V_{EB} = 6\text{V}$, $I_c = 0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 6\text{V}$, $I_c = 1\text{mA}$	90		800	
DC Current Gain	h_{FE}	$V_{CE} = 6\text{V}$, $I_c = 0.1\text{mA}$	50			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c = 100\text{mA}$, $I_B = 10\text{mA}$			0.3	V
Transition Frequency	f_T	$V_{CE} = 6\text{V}$, $I_E = 10\text{mA}$		200		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 6\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		3.5		pF
Noise Figure	NF	$V_{CE} = 6\text{V}$, $I_E = 0.3\text{mA}$ $f = 100\text{Hz}$, $R_G = 10\text{k}\Omega$			2	dB

h_{FE} Rank classification :

Rank	D	E	F	G
h_{FE}	90~180	150~300	250~500	400~800

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