

<Transistor>

# 2SC5398

For Low Frequency Amplify Application  
Silicon NPN Epitaxial Type Micro(Frame type)

## DESCRIPTION

2SC5398 is a silicon NPN epitaxial type transistor. It is designed for low frequency voltage amplify application.

## FEATURE

- Small collector to emitter saturation voltage.  
 $V_{CE(sat)}=0.3V$  max (@  $I_C=30mA, I_B=1.5mA$ )
- Excellent linearity of DC forward current gain
- Small package for easy mounting

## APPLICATION

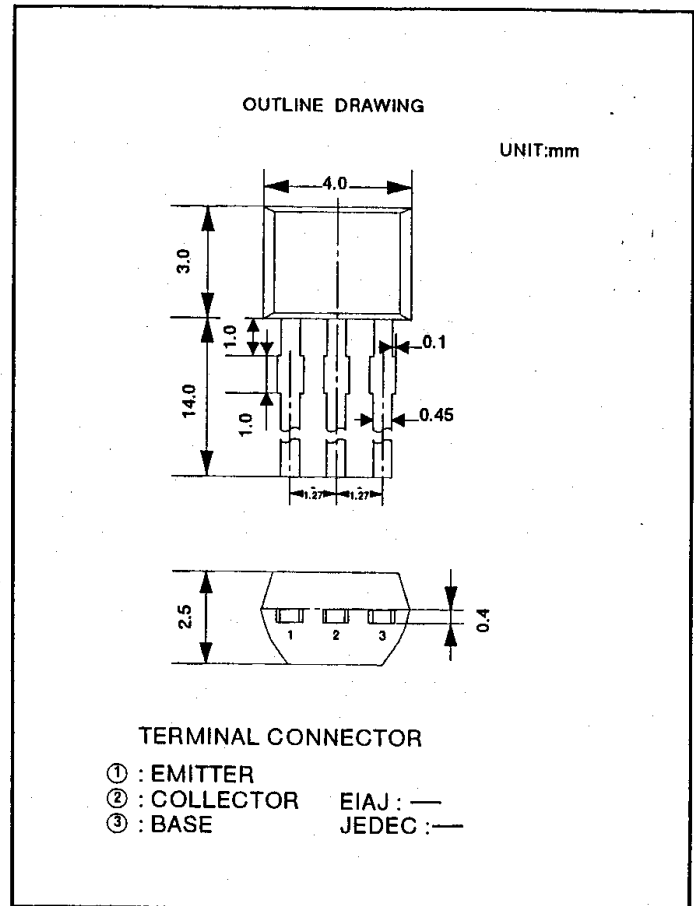
For small machine low frequency voltage amplify application.

## MAXIMUM RATINGS (Ta=25°C)

SYMBOL	PARAMETER	RATINGS	UNIT
V <sub>CB0</sub>	Collector to Base voltage	50	V
V <sub>EB0</sub>	Emitter to Base voltage	6	V
V <sub>CE0</sub>	Collector to Emitter voltage	50	V
I <sub>C</sub>	Collector current	100	mA
P <sub>C</sub>	Collector dissipation (Ta=25°C)	450	mW
T <sub>J</sub>	Junction temperature	+125	°C
T <sub>stg</sub>	Storage temperature	-55to+125	°C

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TESTCONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
V <sub>(BR)CEO</sub>	C to E break down voltage	I <sub>C</sub> =100 μA, R <sub>BE</sub> =∞	50			V
I <sub>CB0</sub>	Collector cut off current	V <sub>CB</sub> =50V, I <sub>E</sub> =0			0.5	μA
I <sub>EB0</sub>	Emitter cut off current	V <sub>EB</sub> =4V, I <sub>C</sub> =0			0.5	μA
h <sub>FE</sub> *	DC forward current gain	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	120		820	—
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =6V, I <sub>C</sub> =0.1mA	70			—
V <sub>CE(sat)</sub>	C to E saturation voltage	I <sub>C</sub> =30mA, I <sub>B</sub> =1.5mA			0.3	V
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =6V, I <sub>E</sub> =-10mA		200		MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> =6V, I <sub>E</sub> =0, f=1MHz		2.0		pF



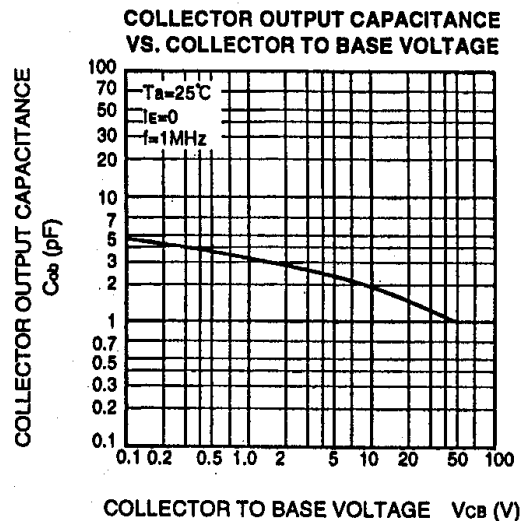
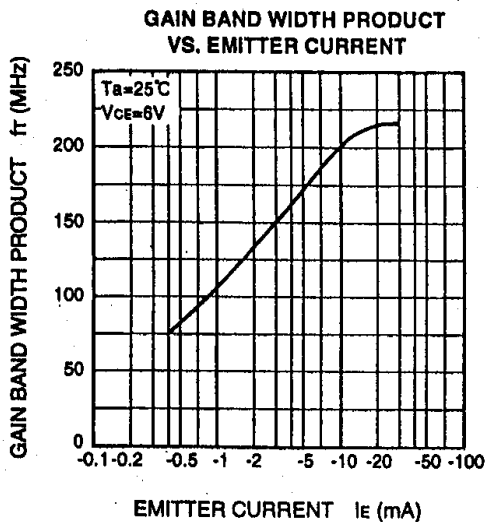
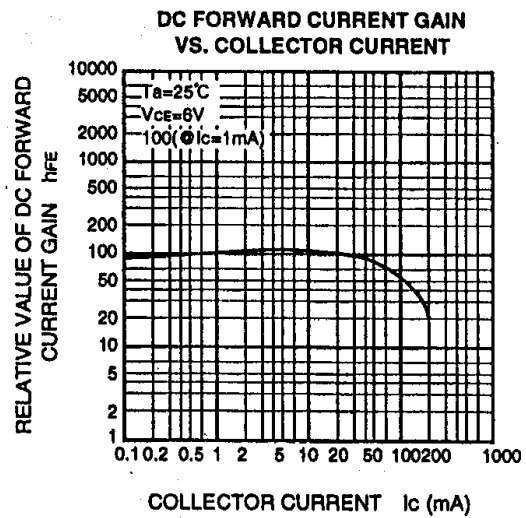
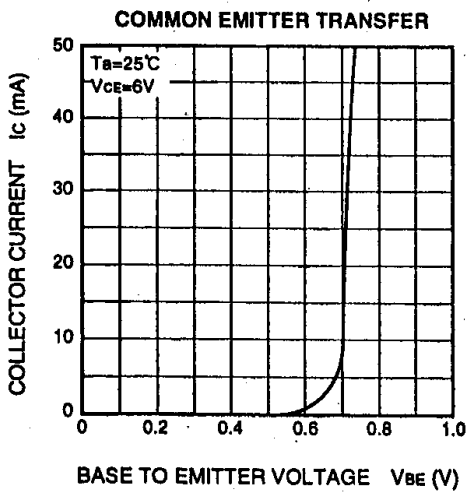
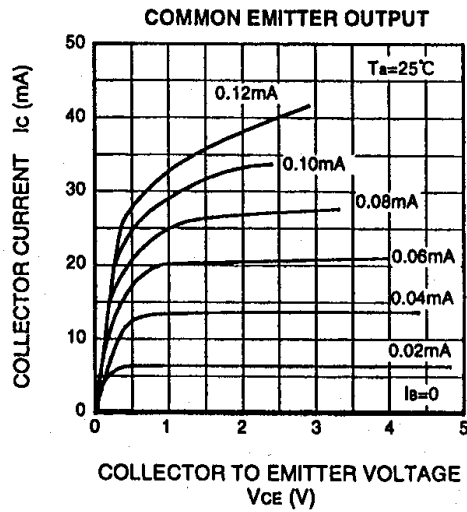
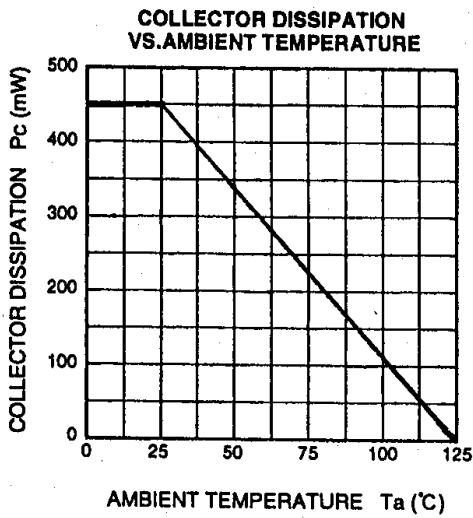
ITEM	Q	R	S	T
h <sub>FE</sub>	120~270	180~390	270~560	390~820

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## TYPICAL CHARACTERISTICS



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