

<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

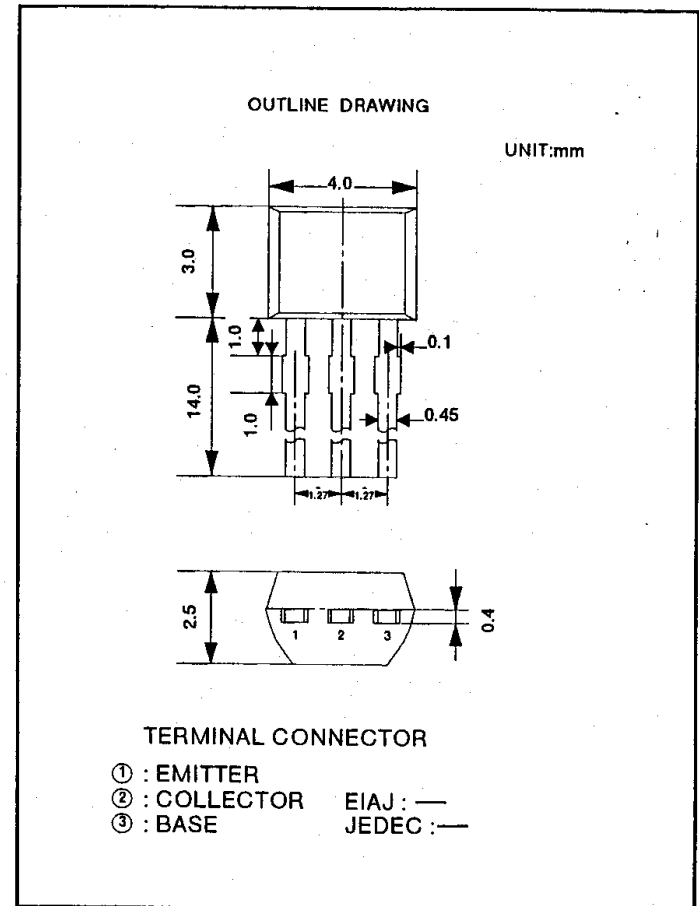
For small machine low frequency voltage amplify application.

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

SYMBOL	PARAMETER	RATINGS	UNIT
V_{CBO}	Collector to Base voltage	50	V
V_{EBO}	Emitter to Base voltage	6	V
V_{CEO}	Collector to Emitter voltage	50	V
I_C	Collector current	100	mA
P_C	Collector dissipation ($T_a=25^\circ C$)	450	mW
T_J	Junction temperature	+125	$^\circ C$
T_{stg}	Storage temperature	-55to+125	$^\circ C$

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

SYMBOL	PARAMETER	TESTCONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	C to E break down voltage	$I_C=100\mu A, R_{BE}=\infty$	50			V
I_{CBO}	Collector cut off current	$V_{CB}=50V, I_E=0$			0.5	μA
I_{EBO}	Emitter cut off current	$V_{EB}=4V, I_C=0$			0.5	μA
h_{FE}^*	DC forward current gain	$V_{CE}=6V, I_C=1mA$	120		820	—
h_{FE}	DC forward current gain	$V_{CE}=6V, I_C=0.1mA$	70			—
$V_{CE(sat)}$	C to E saturation voltage	$I_C=30mA, I_B=1.5mA$			0.3	V
f_T	Gain band width product	$V_{CE}=6V, I_E=-10mA$		200		MHz
C_{ob}	Collector output capacitance	$V_{CB}=6V, I_E=0, f=1MHz$		2.0		pF



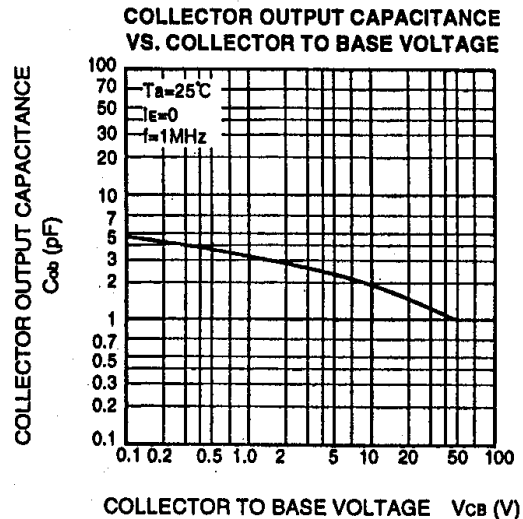
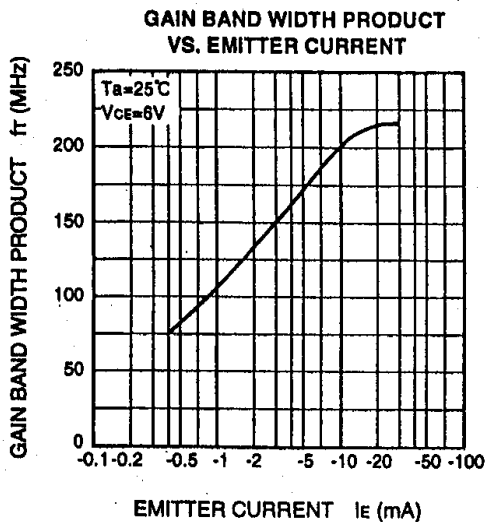
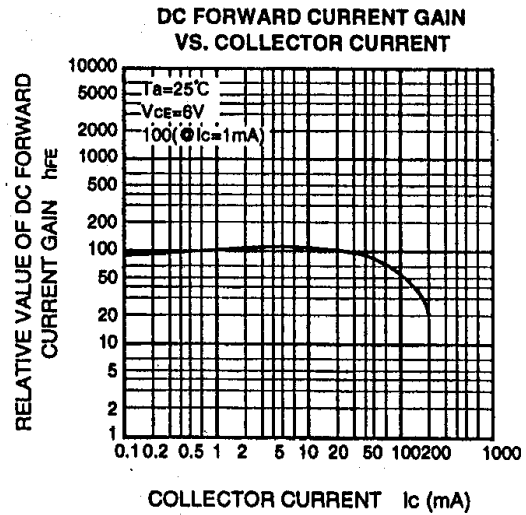
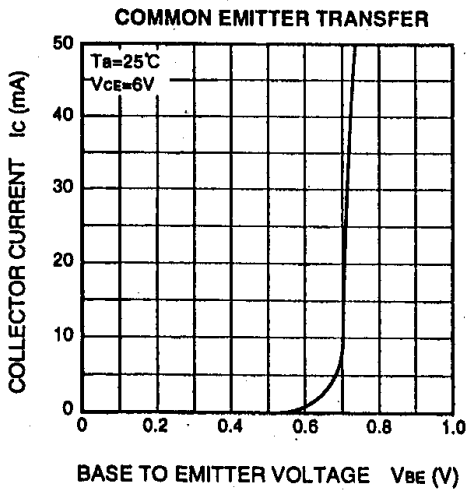
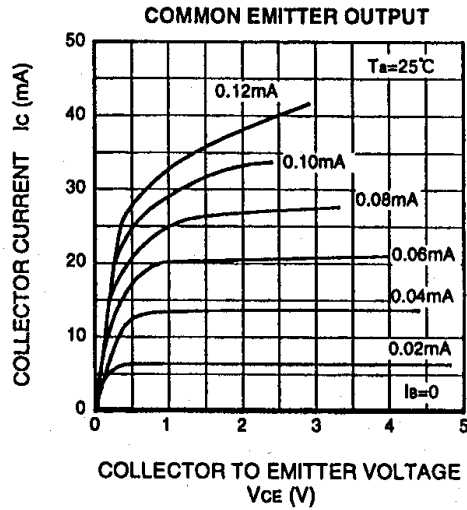
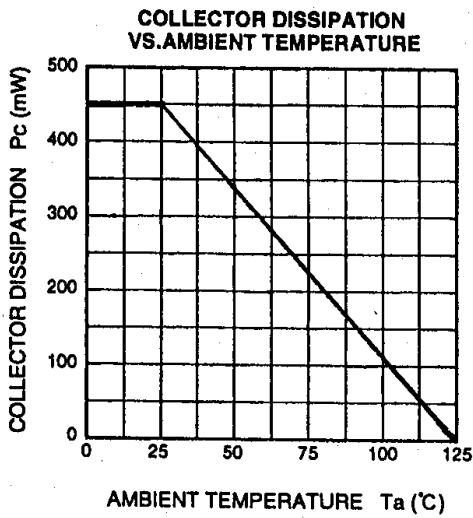
ITEM	Q	R	S	T
h_{FE}	120~270	180~390	270~560	390~820

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TYPICAL CHARACTERISTICS



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