

2SC5398

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

DESCRIPTION

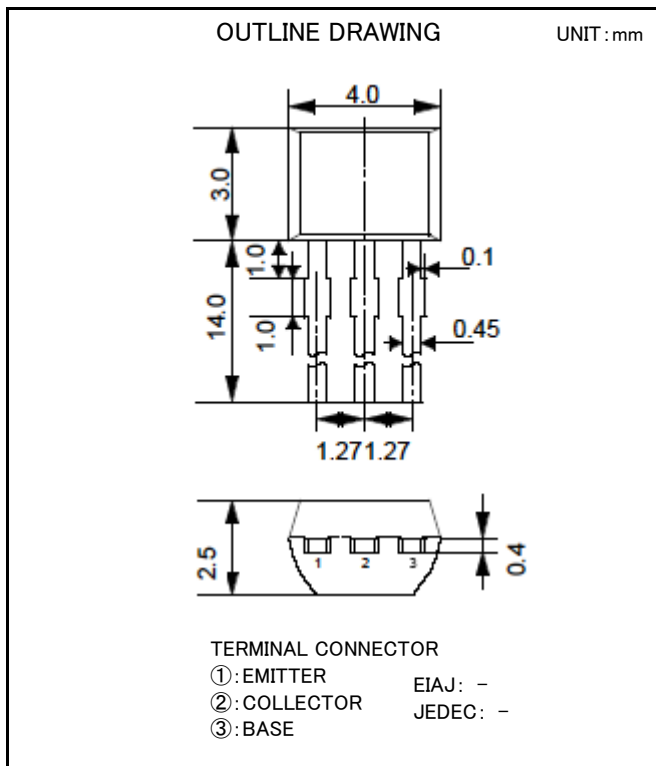
2SC5398 is a silicon NPN epitaxial type transistor. It is designed for low frequency voltage amplify application.

FEATURE

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

APPLICATION

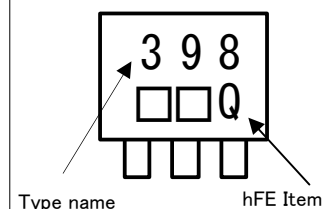
For small machine low frequency voltage amplify application.



MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V_{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	450	mW
T_j	Junction temperature	+150	°C
T_{stg}	Storage temperature	-55~+150	°C

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25°C)

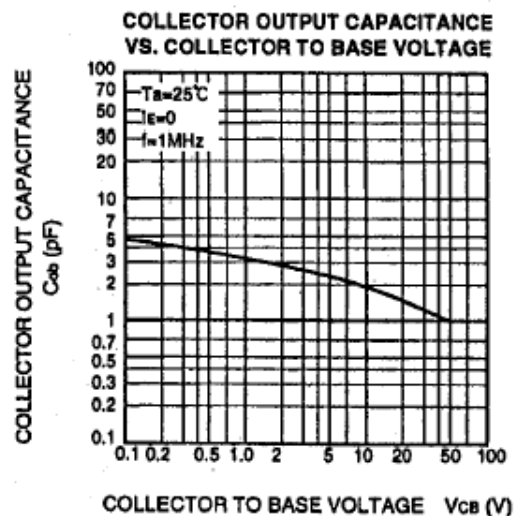
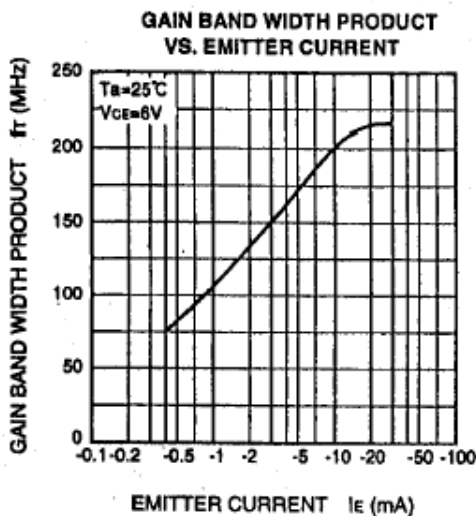
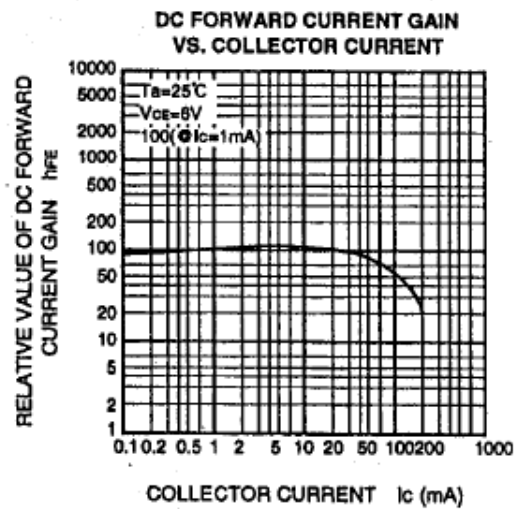
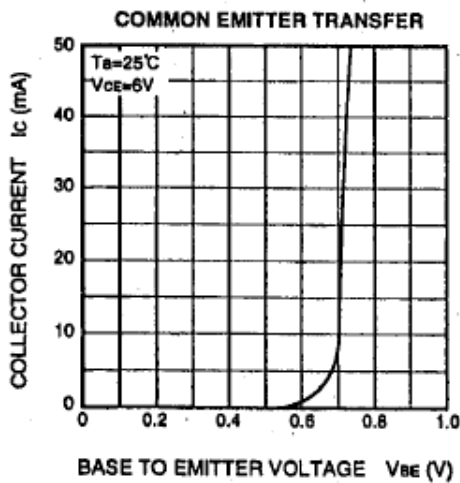
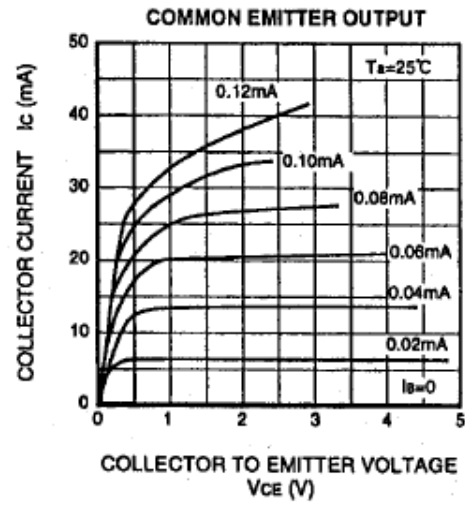
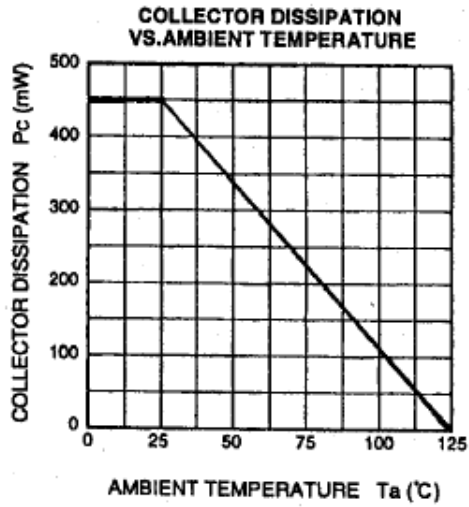
Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	C to E break down voltage	$I_C = 100 \mu A, R_{BE} = \infty$	50	-	-	V
I_{CBO}	Collector cut off current	$V_{CB} = 50V, I_E = 0mA$	-	-	0.5	μA
I_{EBO}	Emitter cut off current	$V_{EB} = 4V, I_C = 0mA$	-	-	0.5	μA
hFE	DC forward current gain ※	$V_{CE} = 6V, I_C = 1mA$	120	(※)	560	-
hFE	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
fT	Gain bandwidth product	$V_{CE} = 6V, I_E = -10mA$	-	200	-	MHz
Cob	Collector output capacitance	$V_{CB} = 6V, I_E = 0mA, f = 1MHz$	-	2.0	-	pF

※ : It shows hFE classification at right table.

Item	Q	R	S
hFE	120~270	180~390	270~560

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Silicon NPN Epitaxial Type Micro (Frame type)

TYPICAL CHARACTERISTICS





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