

# 2SC3928

FOR LOW FREQUENCY AMPLIFY APPLICATION  
SILICON NPN EPITAXIAL TYPE

## DESCRIPTION

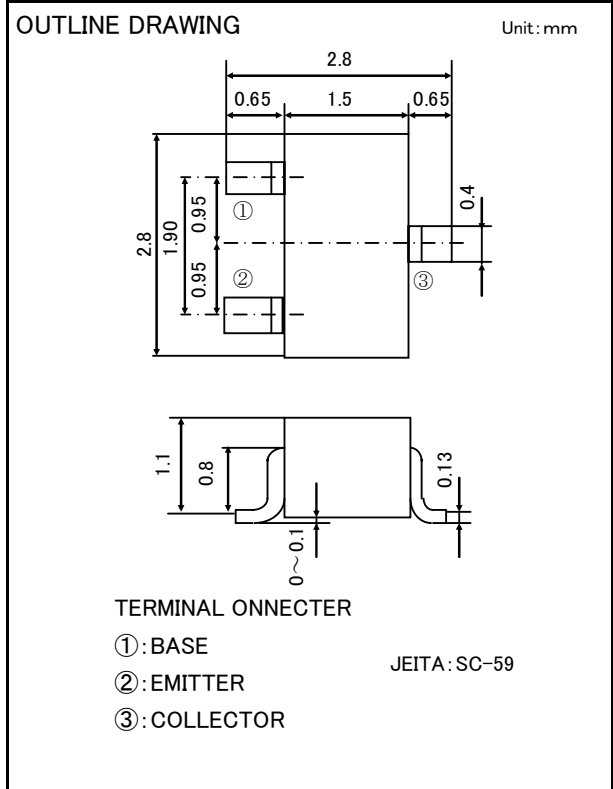
2SC3928 is a super mini package resin sealed silicon NPN epitaxial transistor, It is designed for low frequency voltage application.

## FEATURE

- Small collector to emitter saturation voltage.  
VCE(sat)=0.3V max
- Excellent linearity of DC forward gain.
- Super mini package for easy mounting

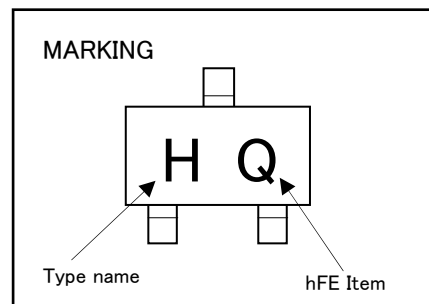
## APPLICATION

For Hybrid IC, small type 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>CEO</sub>	Collector to Emitter voltage	50	V
V <sub>EBO</sub>	Emitter to Base voltage	6	V
I <sub>C</sub>	Collector current	100	mA
P <sub>C</sub>	Collector dissipation	200	mW
T <sub>j</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55~+150	°C



## ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to E break down voltage	V(BR) <sub>CEO</sub>	I <sub>C</sub> =100μA, R <sub>BE</sub> =∞	50	-	-	V
Collector cut off current	ICBO	V <sub>CB</sub> =50V, I <sub>E</sub> =0mA	-	-	0.5	μA
Emitter cut off current	IEBO	V <sub>EB</sub> =4V, I <sub>C</sub> =0mA	-	-	0.5	μA
DC forward current gain	hFE	V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	120	(※)	560	
DC forward current gain	hFE	V <sub>CE</sub> =6V, I <sub>C</sub> =0.1mA	70	-	-	
C to E Saturation Voltage	VCE(sat)	I <sub>C</sub> =30mA, I <sub>B</sub> =1.5mA	-	-	0.3	V
Gain bandwidth product	fT	V <sub>CE</sub> =6V, I <sub>E</sub> =-10mA	-	200	-	MHz
Collector output capacitance	Cob	V <sub>CB</sub> =6V, I <sub>E</sub> =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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