# 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

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Small collector to emitter saturation voltage.

VCE(sat)=0.3V max

•Excellent linearity of DC forward gain.

•Super mini package for easy mounting

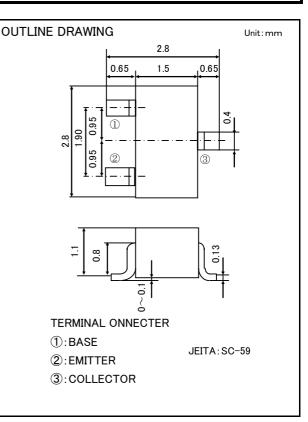
# APPLICATION

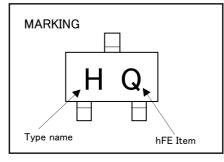
For Hybrid IC, small type machine low frequency voltage Amplify application.

## MAXIMUM RATINGS(Ta=25°C)

Symbol	Parameter	Ratings	Unit
V <sub>CBO</sub>	Collector to Base voltage	50	V
V <sub>CEO</sub>	Collector to Emitter voltage	50	V
$V_{\text{EBO}}$	Emitter to Base voltage	6	V
I <sub>c</sub>	Collector current	100	mA
Pc	Collector dissipation	200	mW
Tj	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55 <b>~</b> +150	°C

# ELECTRICAL CHARACTERISTICS (Ta=25°C)





Parameter	Symbol	Test conditions	Limits			Unit
Farameter	Symbol		Min	Тур	Max	Onic
C to E break down voltage	wn voltage $V(BR)_{CEO}$ I <sub>C</sub> =100 $\mu$ A , R <sub>BE</sub> = $\infty$		50	-	-	V
Collector cut off current		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		-	-	
C to E Saturation Vlotage VCE		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

 $\ensuremath{\mathfrak{K}}$  : It shows hFE classification at right table.

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



6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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