

# 2SC3928A

FOR LOW FREQUENCY AMPLIFY APPLICATION  
SILICON NPN EPITAXIAL TYPE(Super mini type)

## DESCRIPTION

2SC3928A is a super mini package resin sealed silicon NPN epitaxial transistor, It is designed for low frequency voltage application.

## FEATURE

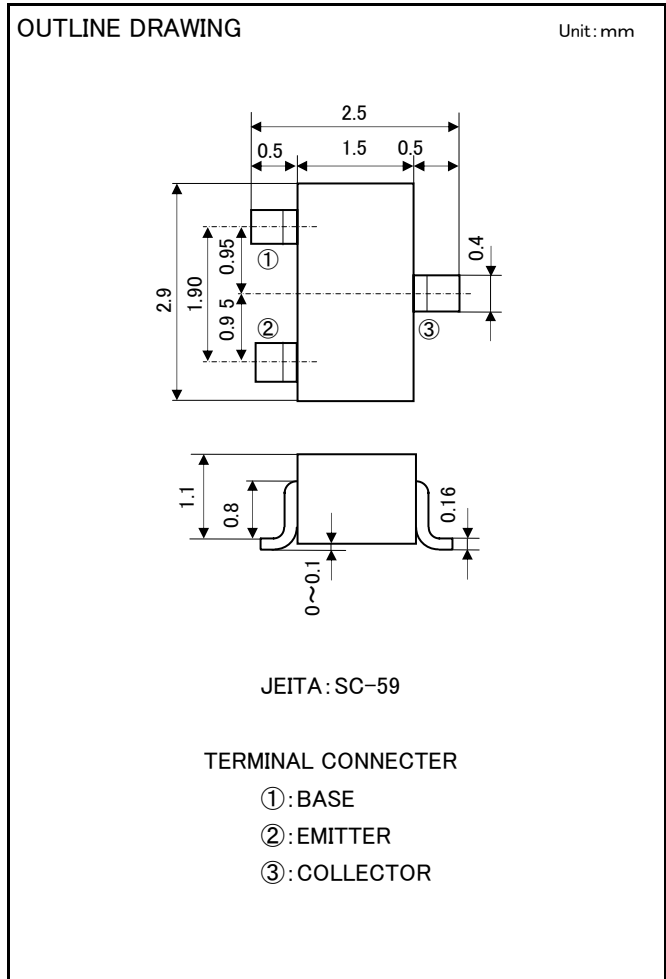
- Small collector to emitter saturation voltage.  
VCE(sat)=0.3V max
- Excellent linearity of DC forward gain.
- Super mini package for easy mounting

## APPLICATION

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

## MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V <sub>CBO</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>O</sub>	Collector current	200	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>	IC=100 μ A, RBE=∞	50	—	—	V
Collector cut off current	ICBO	VCB=50V, IE=0	—	—	0.1	μ A
Emitter cut off current	IEBO	VEB=4V, IC=0	—	—	0.1	μ A
DC forward current gain	hFE	VCE=6V, IC=1mA	120	(※)	820	—
DC forward current gain	hFE	VCE=6V, IC=0.1mA	70	—	—	—
C to E Saturation Voltage	VCE(sat)	IC=100mA, IB=10mA	—	—	0.3	V
Gain bandwidth product	fT	VCE=6V, IE=-10mA	—	200	—	MHz
Collector output capacitance	Cob	VCB=6V, IE=0, f=1MHz	—	4	—	pF
Noise Figure	NF	VCE=6V, IE=-0.1mA, f=1kHz, RG=2k Ω	—	—	15	dB

※) It shows hFE classification in below table.

Item	Q	R	S	T
hFE Item	120~270	180~390	270~560	390~820



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