

2SC3928A

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC3928A is super mini package resin sealed
silicon NPN epitaxial transistor,
It is designed for low frequency voltage application.
Complementary with ISA1530AC1.

FEATURE

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

APPLICATION

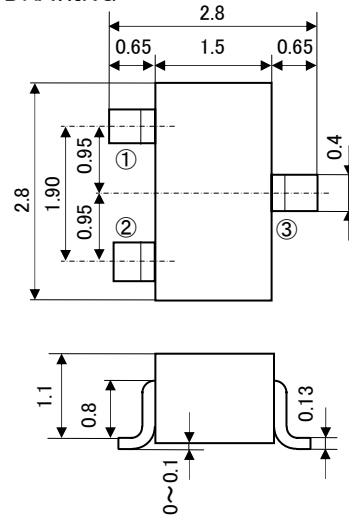
For Hybrid IC, small type machine low frequency voltage
Amplify application.

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

Parameter	Symbol	Ratings	Unit
Collector to Base voltage	V_{CBO}	50	V
Collector to Emitter voltage	V_{CEO}	50	V
Emitter to Base voltage	V_{EBO}	6	V
Collector current	I_C	200	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_j	+150	$^\circ C$
Storage temperature	T_{stg}	-55~+150	$^\circ C$

OUTLINE DRAWING

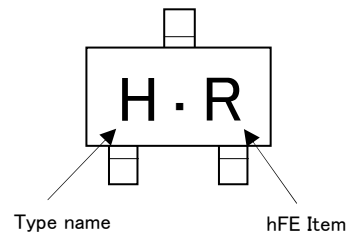
Unit: mm



TERMINAL CONNECTER

- ①: BASE
②: EMITTER
③: COLLECTOR
- JEITA: SC-59
JEDEC: Similar to TO-236

MARKING



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

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to E breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu A, R_{BE}=\infty$	50	—	—	V
Collector cut off current	I_{CBO}	$V_{CB}=50V, I_E=0$	—	—	0.1	μA
Emitter cut off current	I_{EBO}	$V_{EB}=4V, I_C=0$	—	—	0.1	μA
DC forward current gain	h_{FE1}	$V_{CE}=6V, I_C=1mA$	120	(※)	560	—
DC forward current gain	h_{FE2}	$V_{CE}=6V, I_C=0.1mA$	70	—	—	—
C to E Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$	—	—	0.3	V
Gain bandwidth product	fT	$V_{CE}=6V, I_E=-10mA$	—	200	—	MHz
Collector output capacitance	Cob	$V_{CB}=6V, I_E=0, f=1MHz$	—	4	—	pF
Noise Figure	NF	$V_{CE}=6V, I_E=-0.1mA, f=1kHz, R_G=2k\Omega$	—	—	15	dB

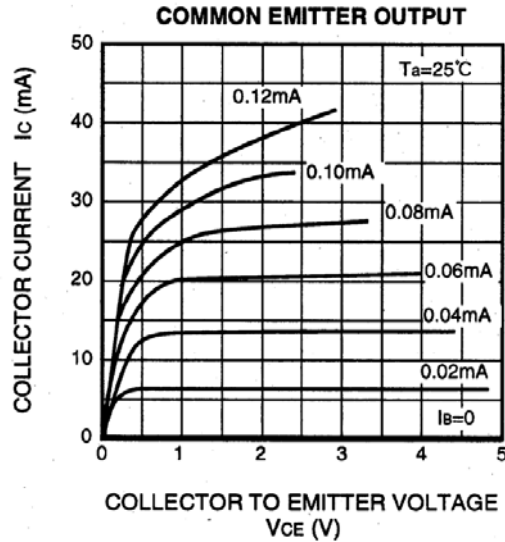
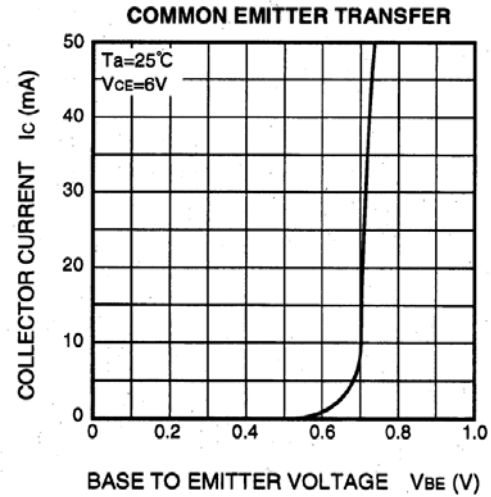
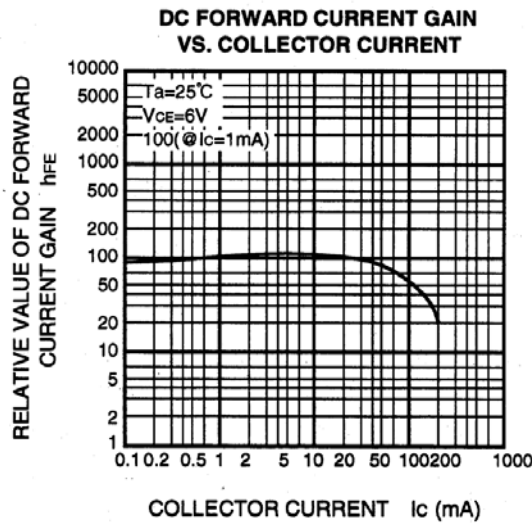
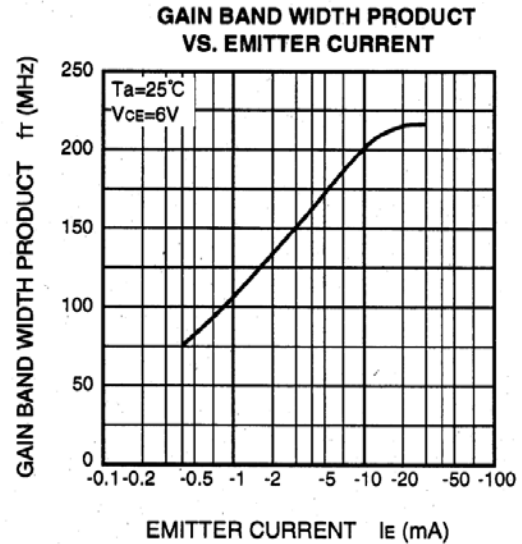
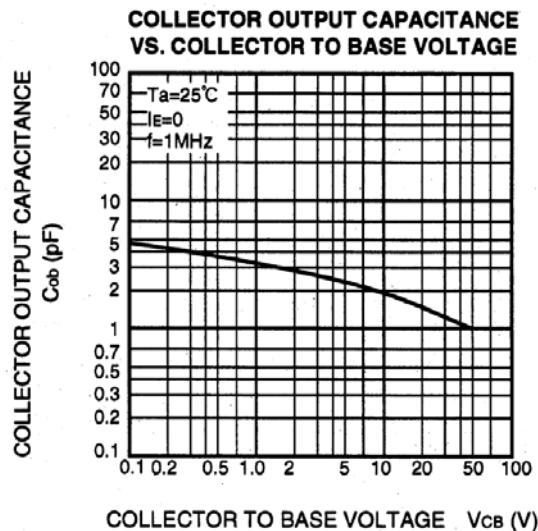
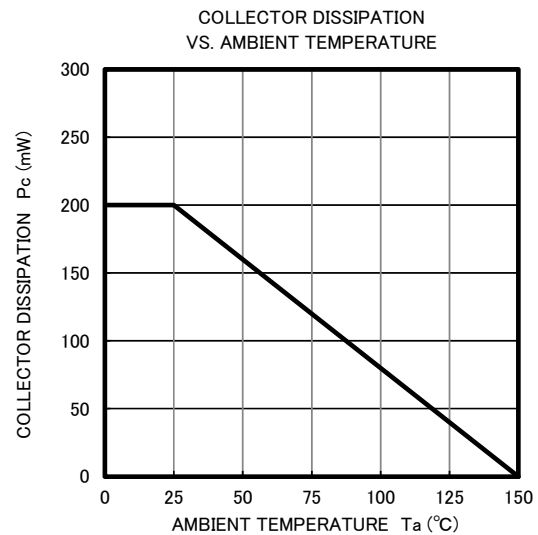
※: It shows hFE classification at right table.

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

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TYPICAL CHARACTERISTICS





Keep safety first in your circuit designs!

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