

2SC3928A

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

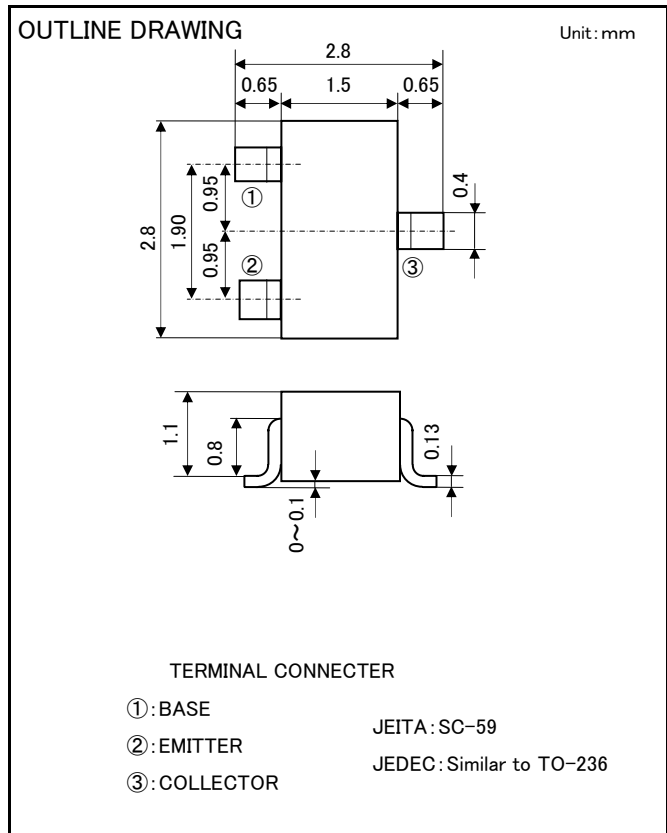
2SC3928A is super mini package resin sealed silicon NPN epitaxial transistor, It is designed for low frequency voltage application. Complementary with ISA1530AC1.

FEATURE

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

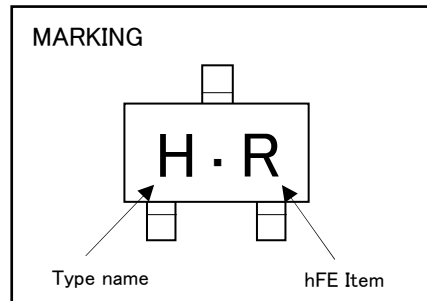
APPLICATION

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



MAXIMUM RATINGS (Ta=25°C)

| 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 | °C |
| Storage temperature | T _{stg} | -55~+150 | °C |



ELECTRICAL CHARACTERISTICS (Ta=25°C)

| Parameter | Symbol | Test conditions | Limits | | | Unit |
|------------------------------|----------------------|--|--------|-----|-----|------|
| | | | Min | Typ | Max | |
| C to E breakdown voltage | V _{(BR)CEO} | I _C =100 μA, R _{BE} =∞ | 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 | hFE1 | V _{CE} =6V, I _C =1mA | 120 | (※) | 560 | — |
| DC forward current gain | hFE2 | 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 | f _T | V _{CE} =6V, I _E =-10mA | — | 200 | — | MHz |
| Collector output capacitance | C _{ob} | V _{CB} =6V, I _E =0, f=1MHz | — | 4 | — | pF |
| Noise Figure | NF | V _{CE} =6V, I _E =-0.1mA, f=1kHz, R _G =2kΩ | — | — | 15 | dB |

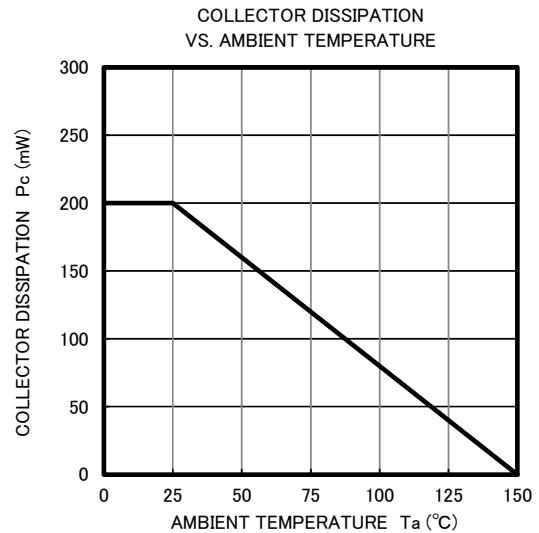
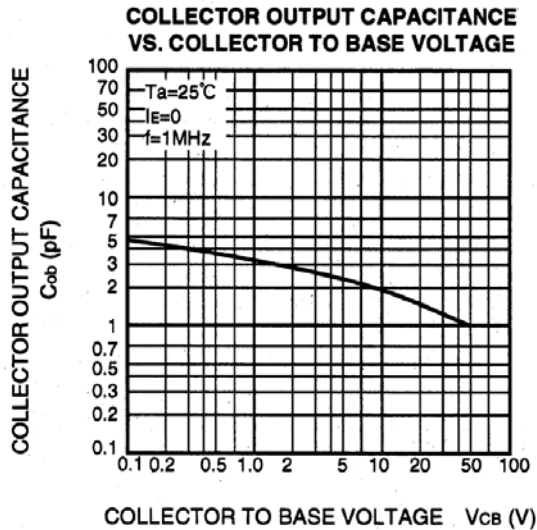
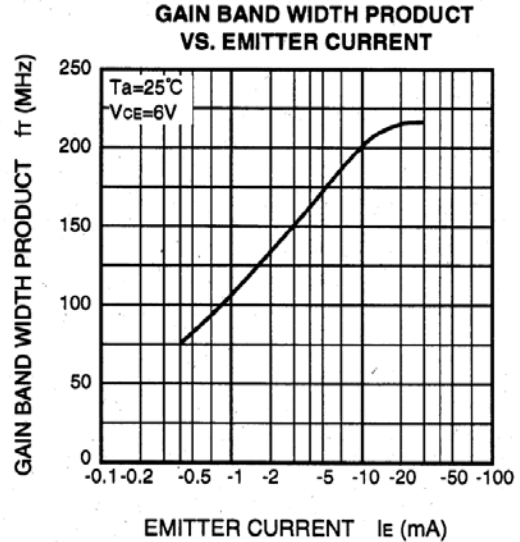
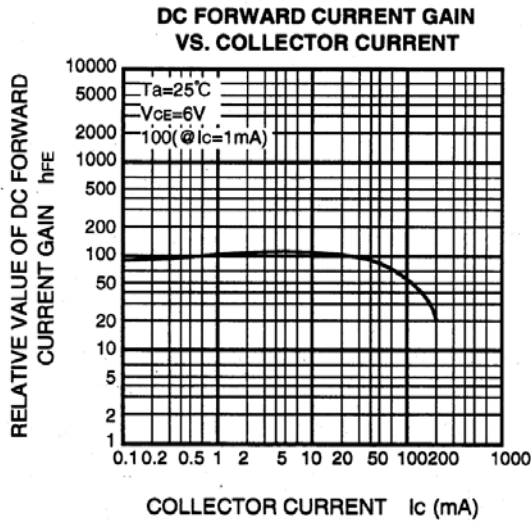
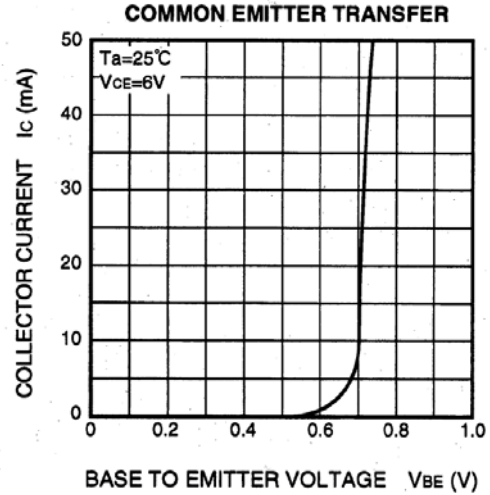
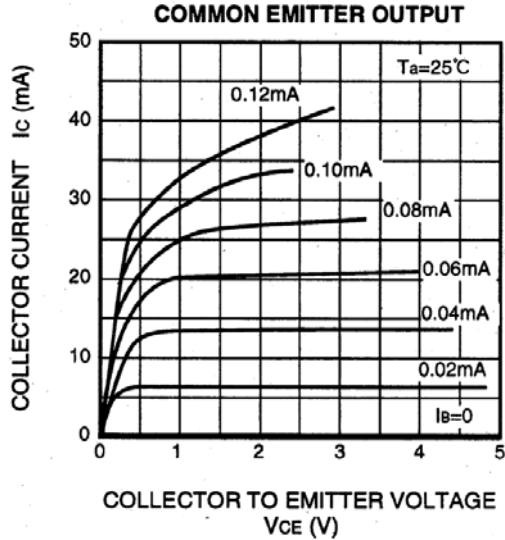
※: It shows hFE classification at right table.

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

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TYPICAL CHARACTERISTICS





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