# 2SA2027

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

#### **DESCRIPTION**

2SA2027 is a super mini package resin sealed silicon PNP epitaxial transistor,

It is designed for high voltage application.

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#### **FEATURE**

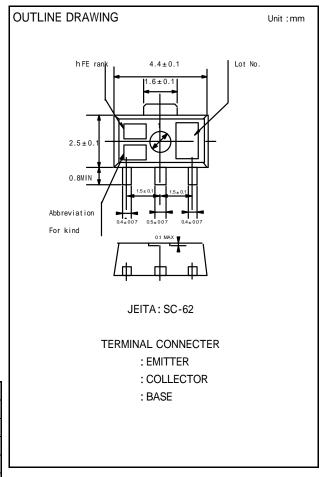
Small collector to emitter saturation voltage. VCE(sat)=-0.5V max

# **APPLICATION**

For Hybrid IC, DC-DC converter

# MAXIMUM RATINGS(Ta=25 )

| Symbol           | Parameter                    | Ratings     | Unit |  |
|------------------|------------------------------|-------------|------|--|
| V <sub>CBO</sub> | Collector to Base voltage    | -300        | V    |  |
| $V_{CEO}$        | Collector to Emitter voltage | -300        | V    |  |
| $V_{EBO}$        | Emitter to Base voltage      | -7          | V    |  |
| I <sub>o</sub>   | Collector current            | -100        | mA   |  |
| P <sub>c</sub>   | Collector dissipation        | 500         | mW   |  |
| Tj               | Junction temperature         | + 150       |      |  |
| T <sub>stg</sub> | Storage temperature          | -55 ~ + 150 |      |  |



# ELECTRICAL CHARACTERISTICS (Ta=25)

| Deversates                   | Symbol    | Test conditions                               | Limits |     |      | Unit |
|------------------------------|-----------|---|--------|-----|------|------|
| Parameter                    |           |   | Min    | Тур | Max  | Unit |
| C to B break down voltage    | V(BR)сво  | I <sub>C</sub> =-50 μ A ,I <sub>E</sub> =0    | -300   | -   | -    | V    |
| E to Bbreak down voltage     | V(BR) EBO | I <sub>E</sub> =-50 μ A ,I <sub>C</sub> =0    | -7     | -   | -    | V    |
| C to E break down voltage    | V(BR)ceo  | $I_{C}=-1$ mA ,R $_{BE}=$                     | -300   | -   | -    | V    |
| Collector cut off current    | ICBO      | V <sub>CB</sub> =300V, I <sub>E</sub> =0mA    | -      | -   | -0.5 | μА   |
| Emitter cut off current      | IEBO      | V <sub>EB</sub> =-5V, I <sub>C</sub> =0mA     | -      | -   | -0.5 | μΑ   |
| DC forward current gain      | hFE       | V <sub>CE</sub> =-10V, I <sub>C</sub> =-10mA  | 50     | -   | 305  |      |
| C to E Saturation Vlotage    | VCE(sat)  | I <sub>C</sub> =-100mA ,I <sub>B</sub> =-10mA | -      | -   | -0.5 | V    |
| Gain bandwidth product       | fT        | V <sub>CE</sub> =-6V, I <sub>E</sub> =10mA    | -      | 40  | -    | MHz  |
| Collector output consoltance | Cah       | \/ C\/   O.f. 4MU-                            |        | 2 A |      | ~⊏   |

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