

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

DESCRIPTION

2SC5625 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.

$$V_{CE(sat)}=0.5V \text{ max}$$

Super mini package for easy mounting

APPLICATION

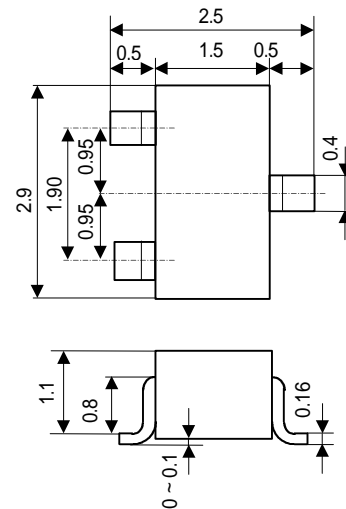
For Hybrid IC, small type machine low frequency voltage Amplify application.

MAXIMUM RATINGS ($T_a=25$)

| Symbol | Parameter | Ratings | Unit |
|-----------|------------------------------|-------------|------|
| V_{CBO} | Collector to Base voltage | 300 | V |
| V_{CEO} | Collector to Emitter voltage | 300 | V |
| V_{EBO} | Emitter to Base voltage | 7 | V |
| I_O | Collector current | 100 | mA |
| P_C | Collector dissipation | 150 | mW |
| T_j | Junction temperature | + 125 | |
| T_{stg} | Storage temperature | -55 ~ + 125 | |

OUTLINE DRAWING

Unit : mm



JEITA : SC-59

TERMINAL CONNECTER

: BASE

: EMITTER

: COLLECTOR

ELECTRICAL CHARACTERISTICS ($T_a=25$)

| Parameter | Symbol | Test conditions | Limits | | | Unit |
|------------------------------|---------------|------------------------------|--------|-----|-----|---------|
| | | | Min | Typ | Max | |
| C to B break down voltage | $V(BR)_{CBO}$ | $I_C=50 \mu A, I_E=0$ | 300 | - | - | V |
| E to B break down voltage | $V(BR)_{EBO}$ | $I_C=50 \mu A, I_C=0$ | 7 | - | - | V |
| C to E break down voltage | $V(BR)_{CEO}$ | $I_C=1mA, R_{BE}=\infty$ | 300 | - | - | V |
| Collector cut off current | I_{CBO} | $V_{CB}=300V, I_E=0mA$ | - | - | 0.5 | μA |
| Emitter cut off current | I_{EBO} | $V_{EB}=5V, I_C=0mA$ | - | - | 0.5 | μA |
| DC forward current gain | hFE | $V_{CE}=10V, I_C=10mA$ | 60 | - | 305 | |
| C to E Saturation Vlotage | $V_{CE(sat)}$ | $I_C=100mA, I_B=10mA$ | - | - | 0.5 | V |
| Gain bandwidth product | fT | $V_{CE}=6V, I_E=-10mA$ | - | 40 | - | MHz |
| Collector output capacitance | Cob | $V_{CB}=6V, I_E=0mA, f=1MHz$ | - | 3.0 | - | pF |



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