RT1P241U-T150

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

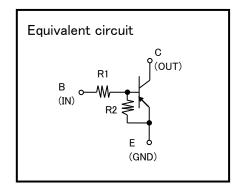
AEC-Q101 Compliance

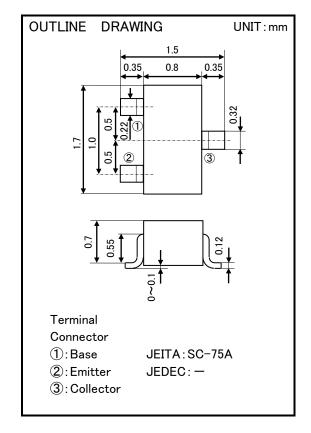
FEATURE

- Built-in bias resistor (R1=22k Ω ,R2=22k Ω)
- Mini package for easy mounting

APPLICATION

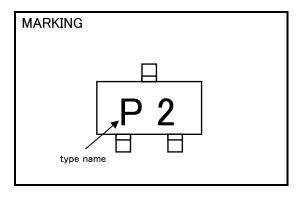
Inverted circuit, switching circuit, interface circuit, driver circuit.





MAXIMUM RATING(Ta=25°C)

| SYMBOL | PARAMETER | RATING | UNIT | |
|------------------|-------------------------------|-------------------|-------------|--|
| V_{CBO} | Collector to Base voltage -50 | | V | |
| V_{EBO} | Emitter to Base voltage | -10 | > | |
| V_{CEO} | Collector to Emitter voltage | -50 | > | |
| V_{IN} | Input voltage | -40 | > | |
| \mathbf{I}_{C} | Collector current | -100 | mA | |
| I_{CM} | Peak Collector current | -200 | mA | |
| Pc | Collector dissipation | 150 | mW | |
| T_{j} | Junction temperature | +150 | ္ | |
| T_{stg} | Storage temperature | −55 ~ +150 | ္ | |



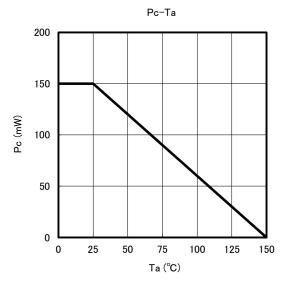
ELECTRICAL CHARACTERISTICS (Ta=25°C)

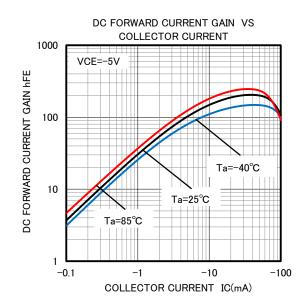
| SYMBOL | PARAMETER | TEST CONDITION | LIMIT | | | UNIT |
|-------------------------|---------------------------|--|-------|------|------|------|
| | | | MIN | TYP | MAX | UNIT |
| $V_{(BR)CEO}$ | C to E breakdown voltage | I _C =-100 μ A、R _{BE} =∞ | -50 | l | _ | V |
| \mathbf{I}_{CBO} | Collector cut off current | $V_{CB}=-50V$, $I_{E}=0$ | _ | l | -0.1 | μΑ |
| I _{EBO} | Emitter cut off current | V _{EB} =-5V, I _C =0 | -89 | -113 | -156 | μΑ |
| h_{FE} | DC forward current gain | V _{CE} =-5V, I _C =-5mA | 50 | l | _ | 1 |
| $V_{\text{CE(sat)}}$ | C to E saturation voltage | I_{C} =-10mA、 I_{B} =-0.5mA | _ | -0.1 | -0.3 | V |
| $V_{I(ON)}$ | Input on voltage | V _{CE} =-0.2V, I _C =-5mA | _ | -1.8 | -3.0 | V |
| $V_{I(OFF)}$ | Input off voltage | V_{CE} =-5 V , I_{C} =-100 μ A | -0.8 | -1.1 | _ | V |
| R1 | Input resistor | _ | 16 | 22 | 28 | kΩ |
| R2/R1 | Resistor ratio | _ | 0.9 | 1.0 | 1.1 | _ |
| f _T | Gain band width product | V _{CE} =-6V, I _E =10mA | _ | 150 | _ | MHz |

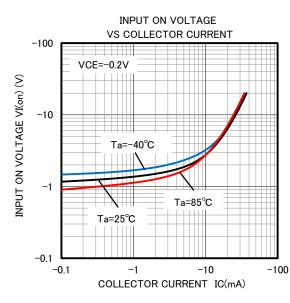
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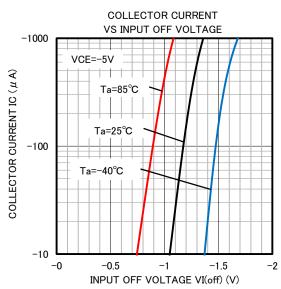
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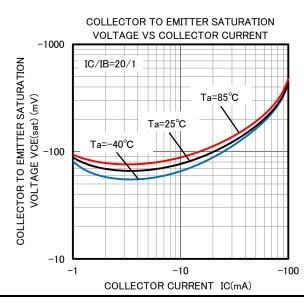












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