## RT2P20M

COMPOSITE TRANSISTOR WITH RESISTOR FOR SWITCHING APPLICATION SILICON PNP EPITAXIAL TYPE

## **DESCRIPTION**

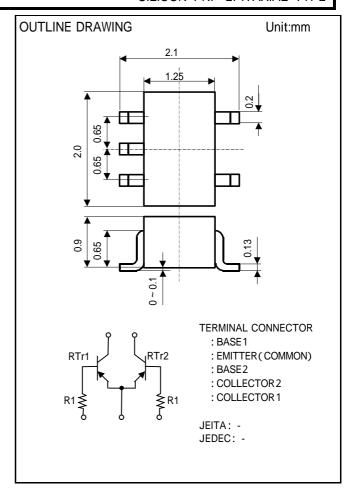
RT2P20M is a composite transistor with built-in bias resistor

#### **FEATURE**

Built-in bias resistor ( R1=4.7 K )
Mini package for easy mounting

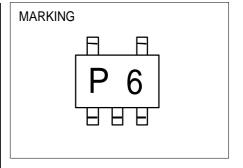
### **APPLICATION**

Inverted circuit , switching circuit , interface circuit , driver circuit



## MAXIMUM RATINGS (Ta=25 )(RTr1, RTr2)

| Symbol           | Parameter                           | Ratings     | Unit |
|------------------|-------------------------------------|-------------|------|
| V <sub>CBO</sub> | Collector to Base voltage           | -50         | V    |
| $V_{EBO}$        | Emitter to Base voltage             | -6          | V    |
| $V_{CEO}$        | Collector to Emitter voltage        | -50         | V    |
| I <sub>c</sub>   | Collector current                   | -100        | mA   |
| I <sub>CM</sub>  | Peak Collector current              | -200        | mA   |
| Pc               | Collector dissipation(Total Ta=25 ) | 150         | mW   |
| T <sub>j</sub>   | Junction temperature                | + 150       |      |
| $T_{stg}$        | Storage temperature                 | -55 ~ + 150 |      |



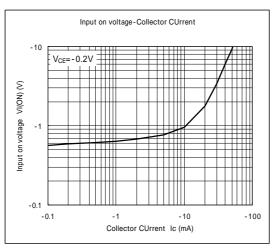
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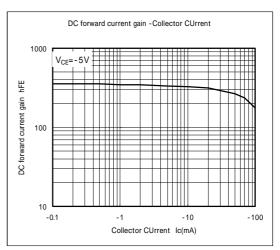
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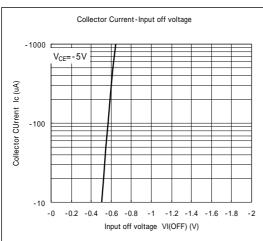
## ELECTRICAL CHARACTERISTICS (Ta=25 )(RTr1, RTr2)

| Symbol               | Parameter                 | Test conditions                                | Limits |      |      | Unit |
|----------------------|---------------------------|--|--------|------|------|------|
|                      |                           |  | Min    | Тур  | Max  | Onit |
| V <sub>(BR)CBO</sub> | C to E break down voltage | $I_{C}$ =-100 $\mu$ A , $R_{BE}$ =             | -50    | ı    | ı    | V    |
| I <sub>CBO</sub>     | Collector cut off current | $V_{CB}$ =-50V , $I_E$ =0                      | -      | -    | -0.1 | μΑ   |
| h <sub>FE</sub>      | DC forward current gain   | V <sub>CE</sub> =-5V , I C=-1mA                | 100    | -    | -    | -    |
| V <sub>CE(sat)</sub> | C to E saturation voltage | I <sub>C</sub> =-10mA , I <sub>B</sub> =-0.5mA | -      | -0.1 | -0.3 | V    |
| R <sub>1</sub>       | Input resistor            |  | 3.3    | 4.7  | 6.1  | K    |
| f <sub>T</sub>       | Gain band width product   | V <sub>CE</sub> =-6V , I <sub>E</sub> =10mA    |        | 150  |      | MHz  |

TYPICAL CHARACTERISTICS (Tr1, Tr2)









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