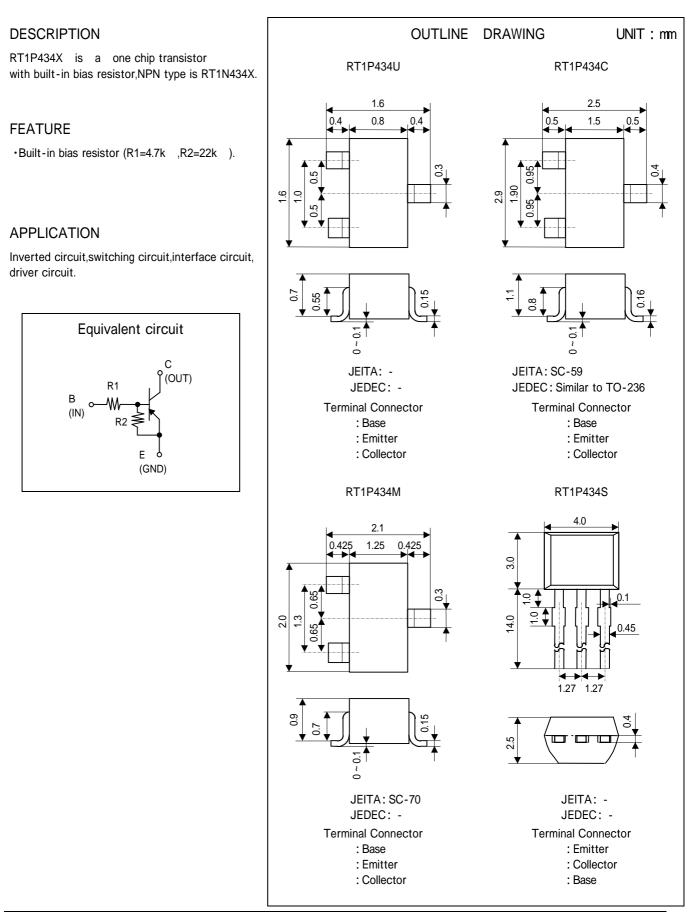
# RT1P434X SERIES

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type



ISAHAYA ELECTRONICS CORPORATION

## Transistor

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Transistor With Resistor For Switching Application

Silicon PNP Epitaxial Type

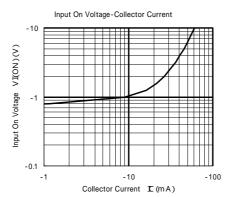
#### MAXIMUM RATING (Ta=25 )

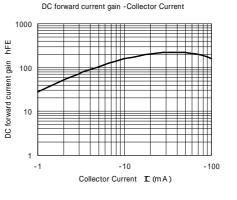
| SYMBOL           | PARAMETER                    | RATING     |            |          |          | UNIT |
|------------------|------------------------------|------------|------------|----------|----------|------|
|                  |                              | RT1P434U   | RT1P434M   | RT1P434C | RT1P434S |      |
| V <sub>CBO</sub> | Collector to Base voltage    | -50        |            |          |          |      |
| V <sub>EBO</sub> | Emitter to Base voltage      | -6         |            |          |          |      |
| V <sub>CEO</sub> | Collector to Emitter voltage | -50        |            |          |          |      |
| Ι <sub>c</sub>   | Collector current            | -100       |            |          |          |      |
| I <sub>CM</sub>  | Peak Collector current       | -200       |            |          |          |      |
| P <sub>c</sub>   | Collector dissipation(Ta=25) | 150        | 2          | 00       | 450      | mW   |
| Tj               | Junction temperature         | +150       | +150       |          |          |      |
| Tstg             | Storage temperature          | -55 ~ +150 | -55 ~ +150 |          |          |      |

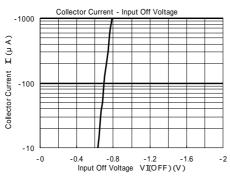
### ELECTRICAL CHARACTERISTICS (Ta=25)

| SYMBOL               | PARAMETER                 | TEST CONDITION                                  | LIMIT |      |      | UNIT |
|----------------------|---------------------------|---|-------|------|------|------|
|                      |                           | TEST CONDITION                                  | MIN   | TYP  | MAX  | UNIT |
| V <sub>(BR)CEO</sub> | C to E break down voltage | Ι <sub>c</sub> =-100 μ A , R <sub>BE</sub> =    | -50   |      |      | V    |
| I <sub>CBO</sub>     | Collector cut off current | V <sub>CB</sub> =-50V , I <sub>E</sub> =0       |       |      | -0.1 | μA   |
| h <sub>FE</sub>      | DC forward current gain   | V <sub>CE</sub> =-5V , I <sub>C</sub> =-5mA     | 50    |      |      | -    |
| $V_{CE(sat)}$        | C to E saturation voltage | I <sub>c</sub> =-10mA , I <sub>B</sub> =-0.5mA  |       | -0.1 | -0.3 | V    |
| V <sub>I(ON)</sub>   | Input on voltage          | V <sub>CE</sub> =-0.2V , I <sub>C</sub> =-5mA   |       | -0.9 | -1.7 | V    |
| V <sub>I(OFF)</sub>  | Input off voltage         | V <sub>CE</sub> =-5V , I <sub>C</sub> =-100 μ A | -0.5  | -0.7 |      | V    |
| R <sub>1</sub>       | Input resistance          |   | 3.3   | 4.7  | 6.1  | k    |
| $R_2 / R_1$          | Resistance ratio          |   | 4.2   | 4.7  | 5.1  |      |
| $f_{T}$              | Gain band width product   | V <sub>CE</sub> =-6V , I <sub>E</sub> =10mA     |       | 150  |      | MHz  |

### **TYPICAL CHARACTERISTICS**







Transistor



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