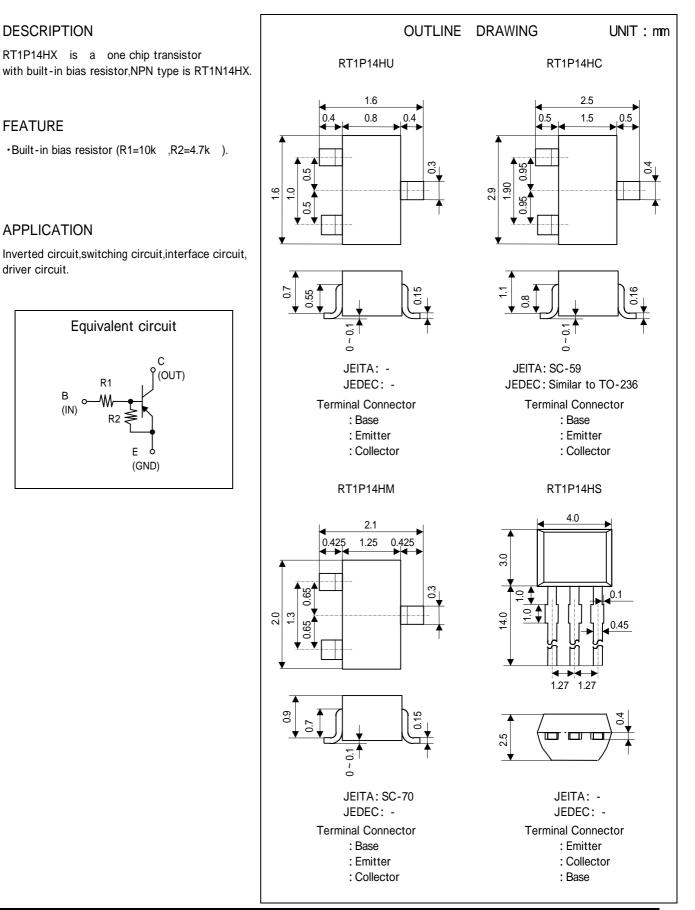
RT1P14HX SERIES

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type



ISAHAYA ELECTRONICS CORPORATION

Transistor

RT1P14HX SERIES

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

MAXIMUM RATING (Ta=25)

| SYMBOL | PARAMETER | RATING | | | | UNIT |
|------------------|------------------------------|------------|-----------------------|----------|----------|------|
| | | RT1P14HU | RT1P14HM | RT1P14HC | RT1P14HS | |
| V _{CBO} | Collector to Base voltage | -50 | | | | |
| V _{EBO} | Emitter to Base voltage | -10 | | | | |
| V _{CEO} | Collector to Emitter voltage | -50 | | | | V |
| I _c | Collector current | -100 | | | | |
| I _{CM} | Peak Collector current | -200 | | | | |
| P _c | Collector dissipation(Ta=25) | 150 | 2 | 200 | 450 | mW |
| Tj | Junction temperature | +150 | i0 +150 | | | |
| Tstg | Storage temperature | -55 ~ +150 | -55 ~ +150 -55 ~ +150 | | | |

ELECTRICAL CHARACTERISTICS (Ta=25)

| SYMBOL | PARAMETER | TEST CONDITION | LIMIT | | | UNIT |
|----------------------|---------------------------|---|-------|------|------|------|
| | | TEST CONDITION | MIN | TYP | MAX | UNIT |
| V _{(BR)CEO} | C to E break down voltage | Ι _c =-100 μ A , R _{BE} = | -50 | | | V |
| I _{CBO} | Collector cut off current | V _{CB} =-50V , I _E =0 | | | -0.1 | μA |
| h _{FE} | DC forward current gain | V _{CE} =-5V , I _C =-10mA | 24 | | | - |
| V _{CE(sat)} | C to E saturation voltage | I _c =-10mA , I _B =-0.5mA | | | -0.3 | V |
| V _{I(ON)} | Input on voltage | V _{CE} =-0.2V , I _C =-5mA | | -2.1 | -3.8 | V |
| V _{I(OFF)} | Input off voltage | V _{CE} =-5V , I _C =-100 μ A | -1.3 | -1.7 | | V |
| R ₁ | Input resistance | | 7 | 10 | 13 | k |
| R_2 / R_1 | Resistance ratio | | 0.37 | 0.47 | 0.57 | |
| f _T | Gain band width product | V _{CE} =-6V , I _E =10mA | | 150 | | MHz |

TYPICAL CHARACTERISTICS

-10 L 0

-0.8

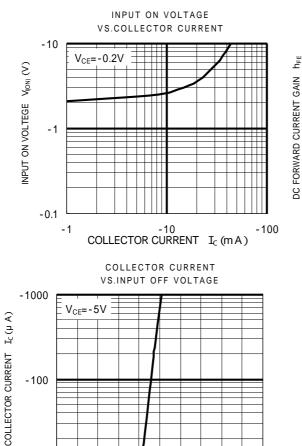
- 1.6

-2.4

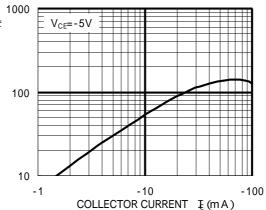
INPUT OFF VOLTAGE VI(OFF) (V)

-3.2

-4



DC FORWARD CURRENT GAIN VS.COLLECTOR CURRENT





Marketing division, Marketing planning department

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