

RT3N22U

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3N22U is a composite transistor built with two RT1N241 in USM6F package.

FEATURE

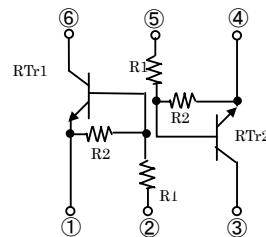
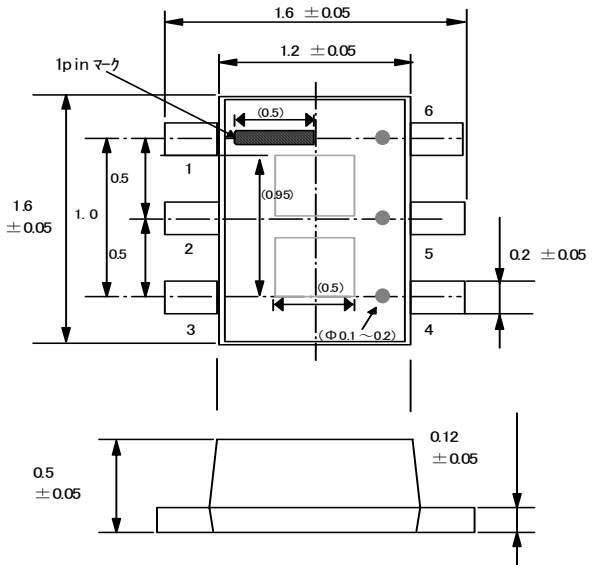
- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

APPLICATION

- Inverted circuit, switching circuit,
- interface circuit, driver circuit

OUTLINE DRAWING

Unit: mm



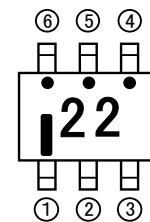
TERMINAL CONNECTOR
①: EMITTER1
②: BASE1
③: COLLECTOR2
④: EMITTER2
⑤: BASE2
⑥: COLLECTOR1

JEITA: -
ISAHAYA: USM6F

MAXIMUM RATING (Ta=25°C)

| SYMBOL | PARAMETER | RATING | UNIT |
|--------|--|----------|------|
| VCBO | Collector to Base voltage | 50 | V |
| VEBO | Emitter to Base voltage | 10 | V |
| VCEO | Collector to Emitter voltage | 50 | V |
| IC | Collector current | 100 | mA |
| ICM | Peak Collector current | 200 | mA |
| PC | Collector dissipation (Total, Ta=25°C) | 125 | mW |
| Tj | Junction temperature | +150 | °C |
| Tstg | Storage temperature | -55~+150 | °C |

MARKING



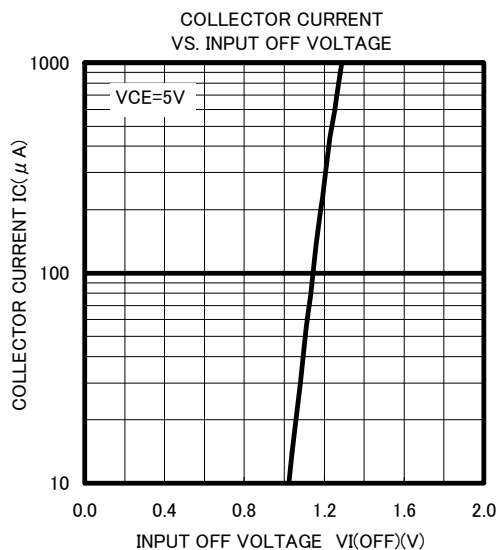
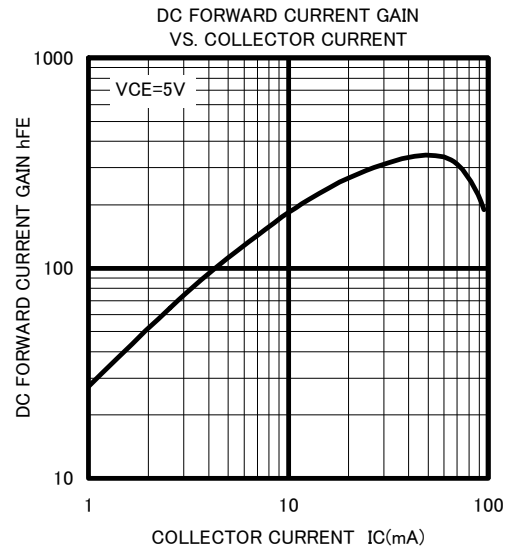
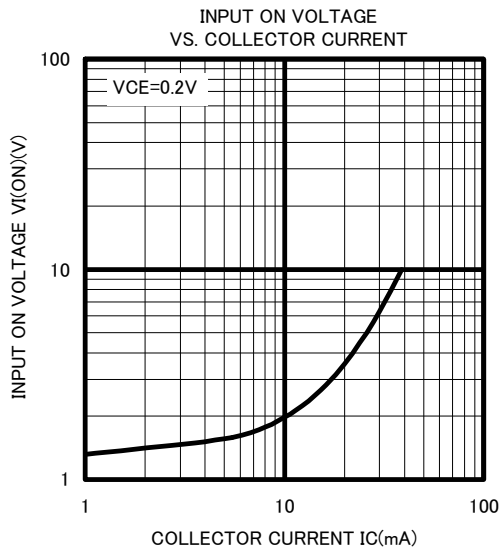
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 common)

| Symbol | Parameter | Test conditions | Limits | | | Unit |
|----------|---|-------------------|--------|-----|-----|------|
| | | | Min | Typ | Max | |
| V(BR)CEO | Collector to Emitter break down voltage | IC=100 μA, RBE=∞ | 50 | - | - | V |
| ICBO | Collector cut off current | VCB=50V, IE=0 | - | - | 0.1 | μA |
| hFE | DC forward current gain | VCE=5V, IC=5mA | 50 | - | - | - |
| VCE(sat) | Collector to Emitter saturation voltage | IC=10mA, IB=0.5mA | - | 0.1 | 0.3 | V |
| VI(ON) | Input on voltage | VCE=0.2V, IC=5mA | - | 1.8 | 3.0 | V |
| VI(OFF) | Input off voltage | VCE=5V, IC=100 μA | 0.8 | 1.1 | - | V |
| R1 | Input resistor | - | 16 | 22 | 28 | kΩ |
| R2/R1 | Resistor ratio | - | 0.9 | 1.0 | 1.1 | - |
| fT | Gain band width product | VCE=6V, IE=-10mA | - | 200 | - | MHz |

TYPICAL CHARACTERISTICS (Tr1,Tr2 common)





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