

# RT3NVVM

Composite Transistor With Resistor  
For Switching Application  
Silicon Epitaxial Type

## DESCRIPTION

RT3NVVM is composite transistor built with two RT1N24B chips in SC-88 package.

## FEATURE

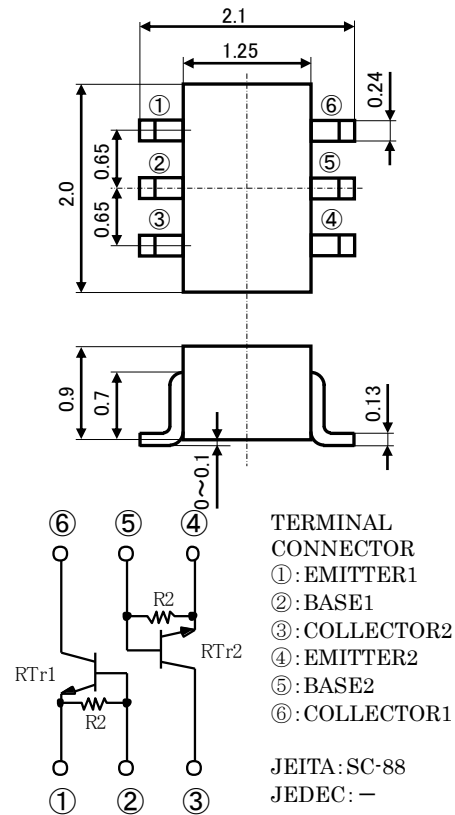
Built-in bias resistor ( $R_2=22k\Omega$ )  
Mini package for easy mounting

## APPLICATION

Inverted circuit, Switching circuit,  
Interface circuit, Driver circuit

## OUTLINE DRAWING

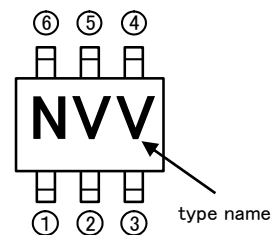
Unit:mm



## MAXIMUM RATING( $T_a=25^\circ\text{C}$ )(RTTr1, RTTr2 COMMON)

| SYMBOL           | PARAMETER                    | RATING   | UNIT |
|------------------|------------------------------|----------|------|
| VCBO             | Collector to Base voltage    | 50       | V    |
| VEBO             | Emitter to Base voltage      | 6        | V    |
| VCEO             | Collector to Emitter voltage | 50       | V    |
| IC               | Collector current            | 100      | mA   |
| ICM              | Peak Collector current       | 200      | mA   |
| PT               | Total dissipation            | 200      | mW   |
| T <sub>j</sub>   | Junction temperature         | +150     | °C   |
| T <sub>stg</sub> | Storage temperature          | -55~+150 | °C   |

## MARKING



## ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$ )(RTTr1, RTTr2 COMMON)

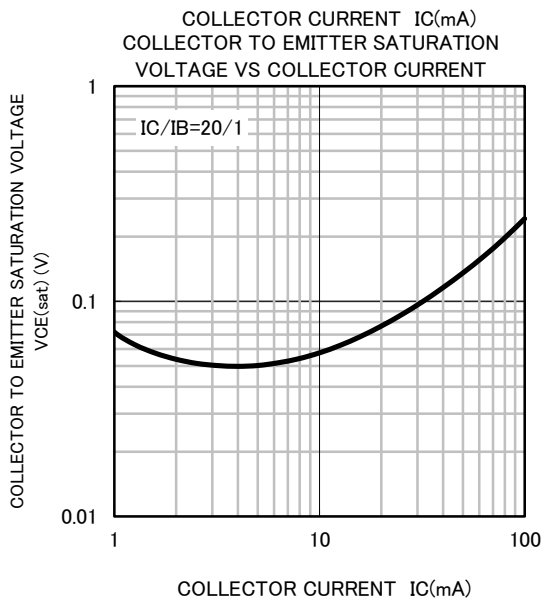
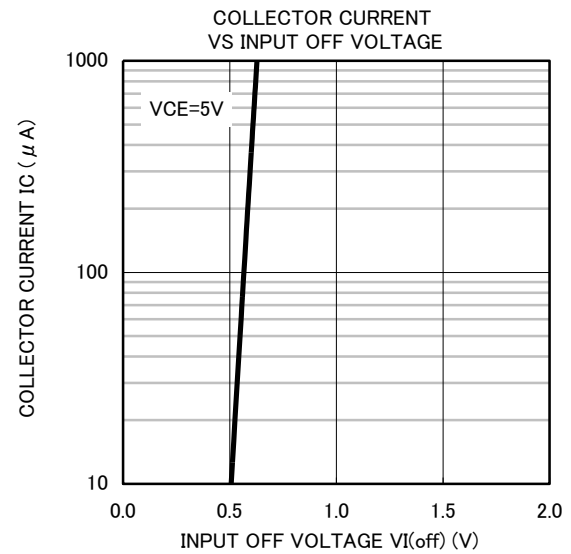
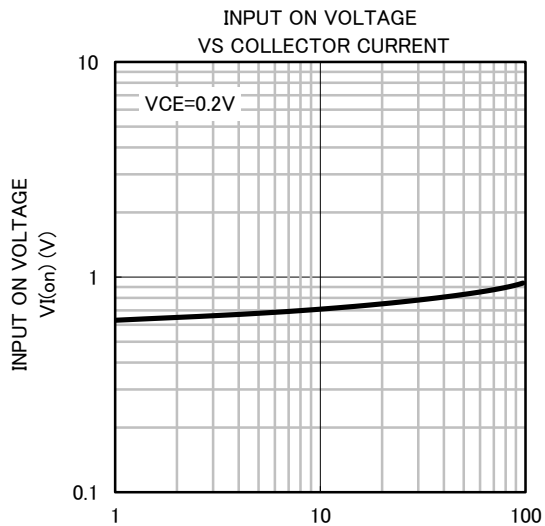
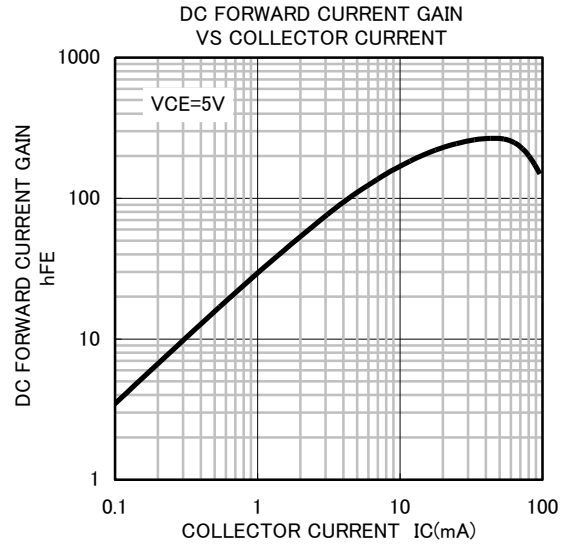
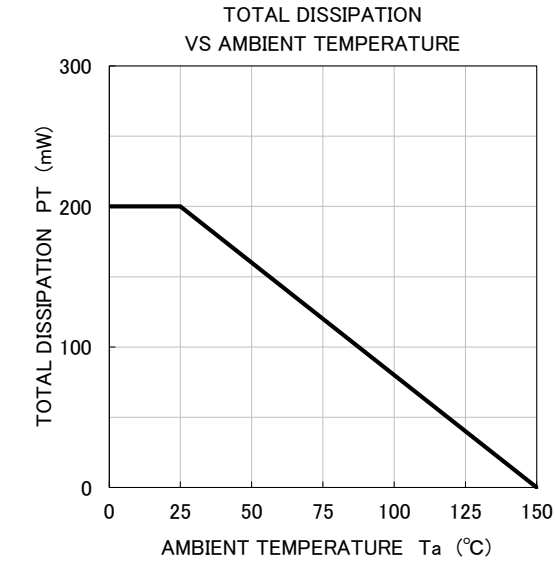
| SYMBOL         | PARAMETER                               | TEST CONDITIONS                         | LIMITS |     |     | UNIT          |
|----------------|---|---|--------|-----|-----|---------------|
|                |   |   | MIN    | TYP | MAX |               |
| V(BR)CEO       | Collector to Emitter breakdown voltage  | $I_C=100\mu\text{A}$ , $R_{BE}=\infty$  | 50     | -   | -   | V             |
| ICBO           | Collector cut off current               | $V_{CB}=50\text{V}$ , $I_E=0$           | -      | -   | 0.1 | $\mu\text{A}$ |
| IEBO           | Emitter cut off current                 | $V_{EB}=5\text{V}$ , $I_C=0$            | 170    | 227 | 330 | $\mu\text{A}$ |
| hFE            | DC forward current gain                 | $V_{CE}=5\text{V}$ , $I_C=5\text{mA}$   | 56     | -   | -   | -             |
| VCE(sat)       | Collector to Emitter saturation voltage | $I_C=10\text{mA}$ , $I_B=0.5\text{mA}$  | -      | -   | 0.3 | V             |
| R <sub>2</sub> | Emitter to Base resistor                | -                                       | 15     | 22  | 29  | k $\Omega$    |
| f <sub>T</sub> | Gain band width product                 | $V_{CE}=6\text{V}$ , $I_E=-10\text{mA}$ | -      | 200 | -   | MHz           |

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## TYPICAL CHARACTERISTICS

( $T_a=25^\circ\text{C}$ )( $R_{T1}, R_{T2}$  COMMON)



COLLECTOR CURRENT  $I_C$ (mA)

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