

TENTATIVE

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL PLANAR TYPE

HN3C16FT

VHF~UHF BAND LOW NOISE AMPLIFIER APPLICATIONS

Unit in mm

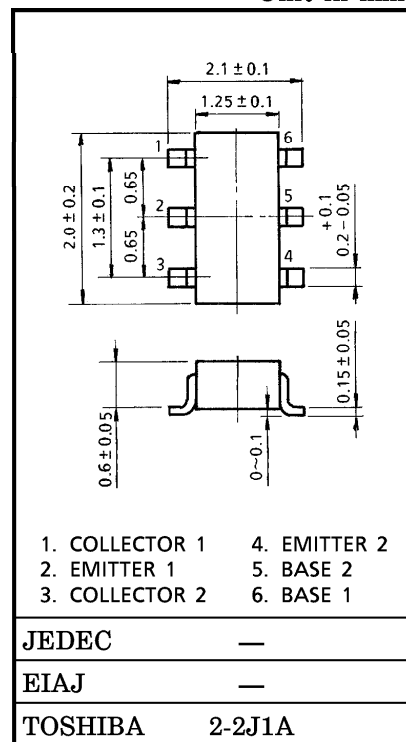
- TWO devices are built in to the super-thin and ultra super mini (6pins) package : TU6

MOUNTED DEVICES

| | |
|---|---------|
| | Q1 / Q2 |
| Three-pins (SSM) mold products are corresponded | 2SC5261 |

MAXIMUM RATINGS (Ta = 25°C)

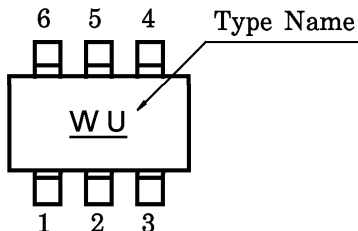
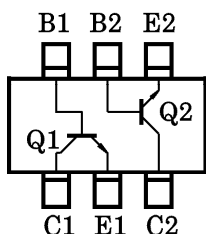
| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|------------------|---------|------|
| Collector-Base Voltage | V _{CBO} | 15 | V |
| Collector-Emitter Voltage | V _{CEO} | 7 | V |
| Emitter-Base Voltage | V _{EBO} | 1.5 | V |
| Collector Current | I _C | 15 | mA |
| Base Current | I _B | 7 | mA |
| Collector Power Dissipation | P _C | 200 | mW |
| Junction Temperature | T _j | 125 | °C |
| Storage Temperature Range | T _{stg} | -55~125 | °C |



Weight : 0.008g

PIN ASSIGNMENT (TOP VIEW)

MARKING



961001EAA1

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ELECTRICAL CHARACTERISTICS (Q1, Q2) (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------------|---------------|--|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = 10V, I_E = 0$ | — | — | 1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = 1V, I_C = 0$ | — | — | 1 | μA |
| DC Current Gain | h_{FE} | $V_{CE} = 5V, I_C = 7mA$ | 50 | — | 160 | — |
| Transition Frequency | f_T | $V_{CE} = 5V, I_C = 7mA$ | 9 | 12 | — | GHz |
| Insertion Gain | $ S_{21e} ^2$ | $V_{CE} = 5V, I_C = 7mA,$ $f = 2000MHz$ | — | 10.5 | — | dB |
| Noise Figure | NF | $V_{CE} = 5V, I_C = 3mA,$ $f = 2000MHz$ | — | 1.7 | 3 | dB |
| Reverse Transfer Capacitance Q1 | C_{re} | $V_{CB} = 5V, I_E = 0,$ $f = 1MHz$ (Note) | — | 0.45 | 0.85 | pF |
| Reverse Transfer Capacitance Q2 | C_{re} | | — | 0.4 | 0.8 | |

(Note) C_{re} is measured by 3 terminal method capacitance bridge.