

RT3P77M

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3P77M is a composite transistor built with two RT1P140 in SC-88 package.

FEATURE

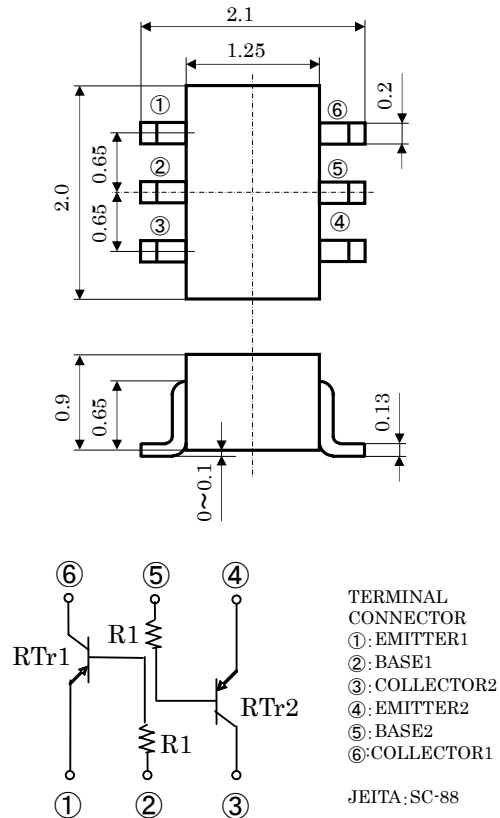
- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

APPLICATION

Inverted circuit, switching circuit,
interface circuit, driver circuit

OUTLINE DRAWING

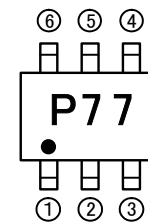
Unit: mm



MAXIMUM RATING (Ta=25°C) (The characteristics apply to both Tr1 and Tr2.)

| SYMBOL | PARAMETER | RATING | UNIT |
|------------------|--|----------|------|
| V _{CBO} | Collector to Base voltage | -50 | V |
| V _{EBO} | Emitter to Base voltage | -6 | V |
| V _{CEO} | Collector to Emitter voltage | -50 | V |
| I _C | Collector current | -100 | mA |
| I _{CM} | Peak Collector current | -200 | mA |
| P _C | Collector dissipation (Total, Ta=25°C) | 150 | mW |
| T _j | Junction temperature | +150 | °C |
| T _{stg} | Storage temperature | -55~+150 | °C |

MARKING



RT3P77M

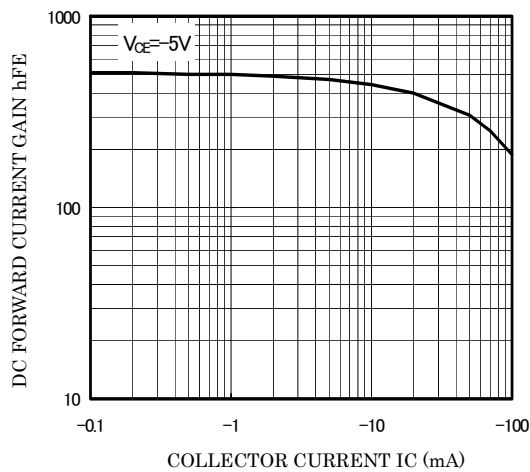
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (The characteristics apply to both Tr1 and Tr2.)

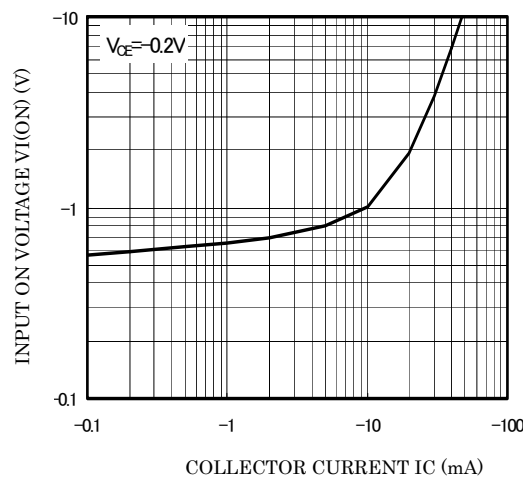
| Symbol | Parameter | Test conditions | Limits | | | Unit |
|----------|---|------------------------------------|--------|------|------|------------|
| | | | Min | Typ | Max | |
| V(BR)CEO | Collector to Emitter break down voltage | $I_C = -100\mu A, R_{BE} = \infty$ | -50 | | | V |
| ICBO | Collector cut off current | $V_{CB} = -50V, I_E = 0$ | | | -0.1 | μA |
| hFE | DC forward current gain | $V_{CE} = -5V, I_C = -1mA$ | 100 | | | - |
| VCE(sat) | Collector to Emitter saturation voltage | $I_C = -10mA, I_B = -0.5mA$ | | -0.1 | -0.3 | V |
| R1 | Input resistor | | 7 | 10 | 13 | K Ω |
| fT | Gain band width product | $V_{CE} = -6V, I_E = 10mA$ | | 150 | | MHz |

TYPICAL CHARACTERISTICS (RT1,RT2)

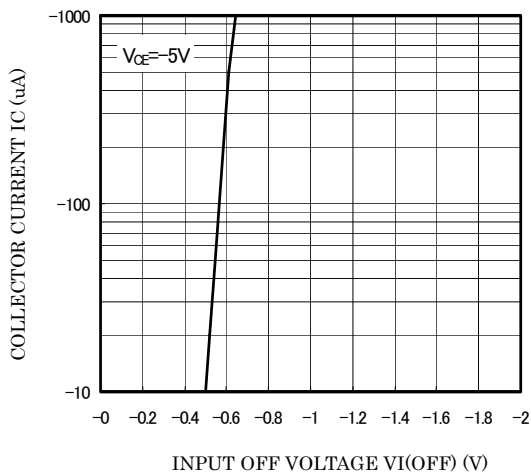
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



INPUT ON VOLTAGE
VS. COLLECTOR CURRENT



COLLECTOR CURRENT
VS. INPUT OFF VOLTAGE





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