RT1P230X SERIES

Transistor

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

DESCRIPTION

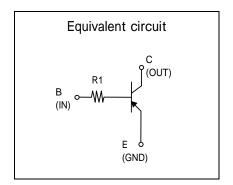
RT1P230X is a one chip transistor with built-in bias resistor,NPN type is RT1N230X.

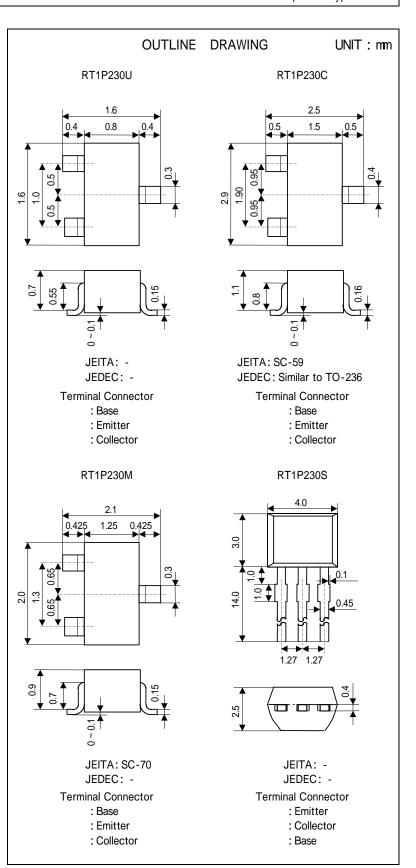
FEATURE

•Built-in bias resistor (R1=2.2k).

APPLICATION

Inverted circuit, switching circuit, interface circuit, driver circuit.





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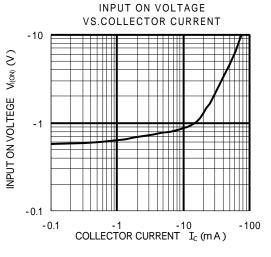
Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

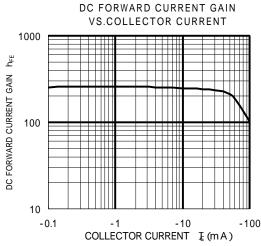
MAXIMUM RATING (Ta=25)

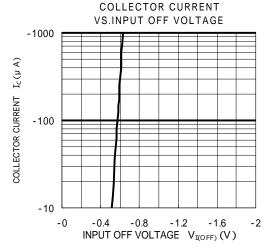
| SYMBOL | PARAMETER | RATING | | | | UNIT |
|------------------|-------------------------------|------------|--------------------|----------|----------|------|
| | | RT1P230U | RT1P230M | RT1P230C | RT1P230S | UNIT |
| V _{CBO} | Collector to Base voltage | | V | | | |
| V_{EBO} | Emitter to Base voltage | | V | | | |
| V_{CEO} | Collector to Emitter voltage | | V | | | |
| Ι _c | Collector current | | mA | | | |
| I _{CM} | Peak Collector current | -200 | | | | |
| P_{c} | Collector dissipation(Ta=25) | 150 | 2 | 00 | 450 | mW |
| Tj | Junction temperature | +150 | +150 | | | |
| Tstg | Storage temperature | -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 | $I_{C}=-100 \muA$, $R_{BE}=$ | -50 | | | V |
| I _{CBO} | Collector cut off current | V_{CB} =-50V , I $_{E}$ =0 | | | -0.1 | μΑ |
| h _{FE} | DC forward current gain | V_{CE} =-5V , I $_{C}$ =-1mA | 100 | | | - |
| $V_{CE(sat)}$ | C to E saturation voltage | $I_C = -10 \text{mA}$, $I_B = -0.5 \text{mA}$ | | | -0.3 | V |
| R ₁ | Input resistance | | 1.5 | 2.2 | 2.9 | k |
| f_{\scriptscriptstyleT} | Gain band width product | V_{CE} =-6V , I $_{E}$ =10mA | | 150 | | MHz |







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