# RTGN426AP

TRANSISTOR WITH RESISTOR
FOR SWITHING APPLICATION
SILICON NPN EPITAXIAL TYPE

## DISCRIPTION

RTGN426AP is a one chip transistor with built-in bias transistor.

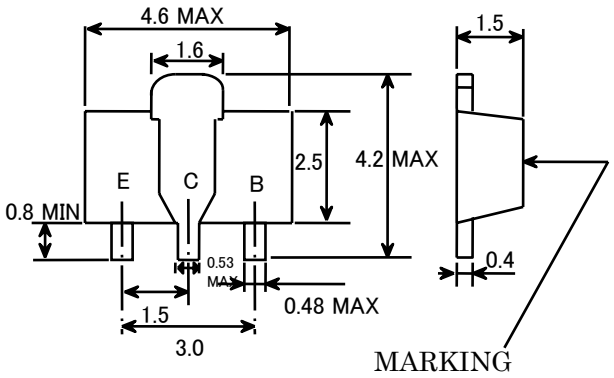
## FEATURE

- Built-in bias resistor (R1=0.47kΩ,R2=4.7kΩ)
- High collector current IC=1A
- Built-in zener diode between collector and base

## APPLICATION

Motor driver circuit

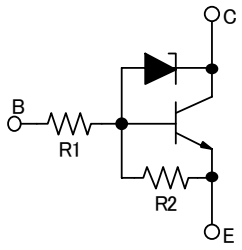
OUTLINE DRAWING Unit:mm



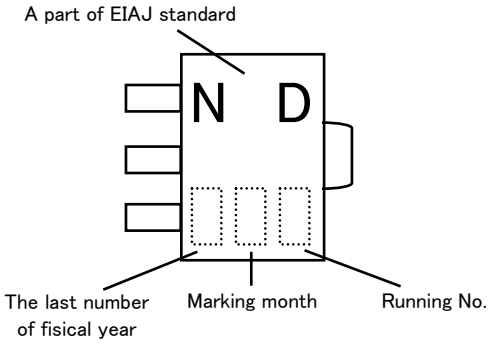

TERMINAL CONNECTOR

E: EMITTER
C: COLLECTOR
B: BASE JEDEC :—

EQUIVALENT CIRCUIT




MARKING




## MAXIMUM RATING (Ta=25℃)

| SYMBOL | PARAMETER | RATING | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector to Base voltage | 60±10 | V |
| $V_{EBO}$ | Emitter to Base voltage | 10 | V |
| $V_{CEO}$ | Collector to Emitter voltage | 60±10 | V |
| $I_C$ | Collector current (DC) | 1 | A |
| $I_{CM}$ | Collector current (pulse) | 2 | A |
| $P_C$ | Collector dissipation | 500 | mW |
| $T_j$ | Junction temperature | +150 | ℃ |
| $T_{stg}$ | Storage temperature | -55～+150 | ℃ |

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## ELECTRICAL CHARACTERISTICS (Ta=25℃)

| Symbol | Parameter | Test conditions | Limits | | | Unit |
|---|---|---|---|---|---|---|
| | | | Min | Typ | Max | |
| $I_{CBO}$ | Collector cut off current | $V_{CB}$=40V, IE=0 | — | — | 0.1 | uA |
| $V_{OL}$ | Output voltage | VI=5V, $I_C$=0.5A | — | — | 0.5 | V |
| $V_{IL}$ | Input voltage (OFF) | $V_{CE}$=5V, $I_C$=100 $\mu$ A | 0.3 | — | — | V |
| hFE1 | DC forward current gain | $V_{CE}$=2V, $I_C$=0.1A | 200 | — | — | — |
| hFE2 | DC forward current gain | $V_{CE}$=2V, $I_C$=0.5A | 300 | — | — | — |
| hFE3 | DC forward current gain | $V_{CE}$=2V, $I_C$=1A | 200 | — | — | — |
| $R_1$ | Input resistor | — | 0.329 | 0.470 | 0.611 | KΩ |
| $R_2$ | Emitter – Base resistor | — | 3.29 | 4.70 | 6.11 | KΩ |

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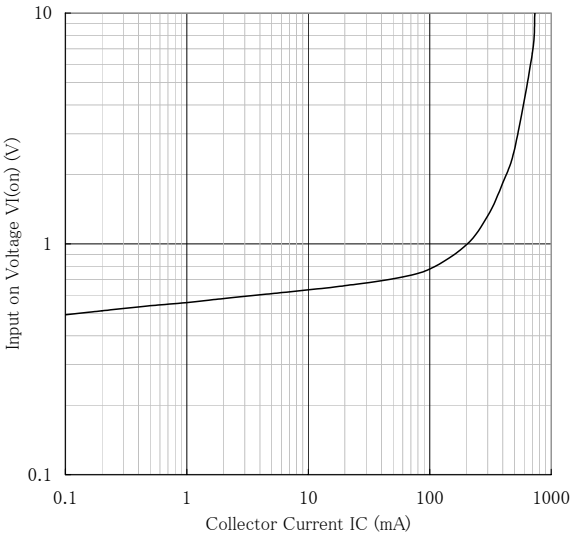
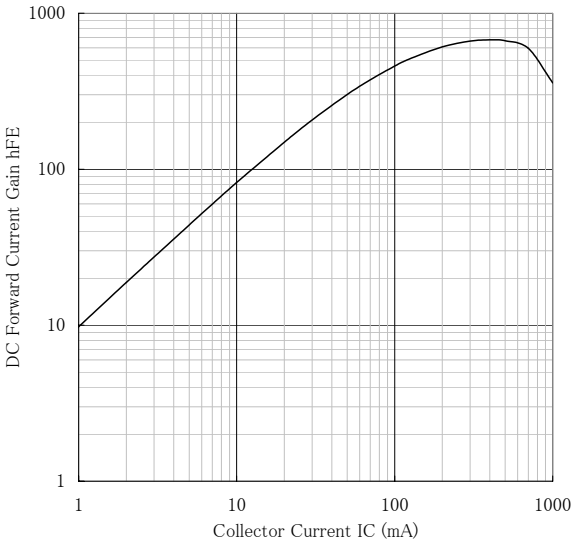
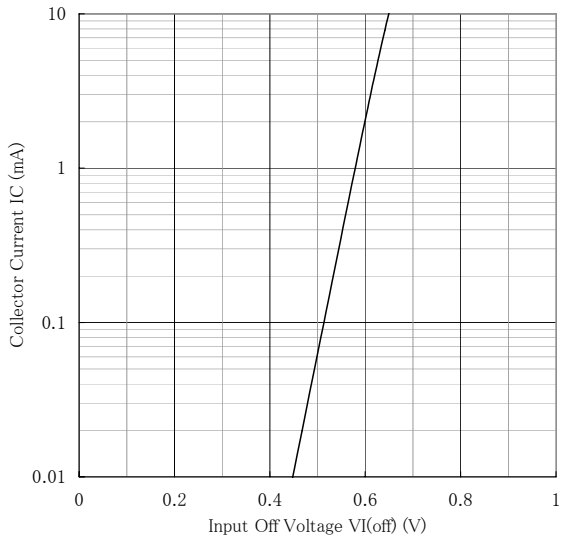
VI(on) – IC




hFE – IC




IC – VI(off)



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