

DISCRIPTION

RTGN141AP is a one chip transistor with built-in bias transistor.

FEATURE

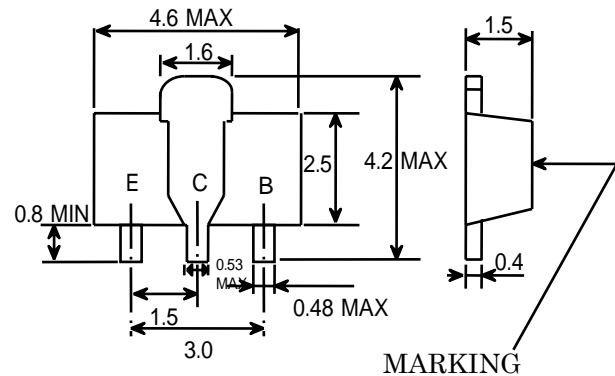
Built-in bias resistor (R1=10k Ω ,R2=10k Ω)
High collector current IC=1A
Built-in zener diode between collector and base

APPLICATION

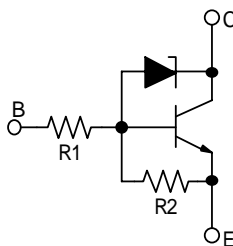
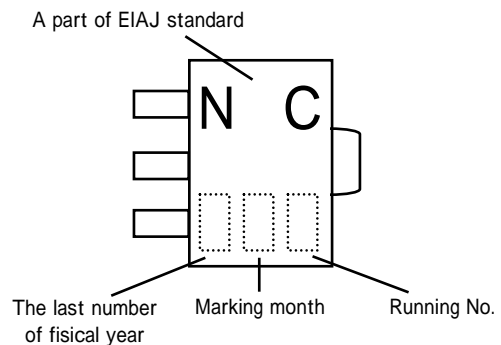
Motor driver circuit

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 \pm 10	V
V _{EBO}	Emitter to Base voltage	10	V
V _{CEO}	Collector to Emitter voltage	60 \pm 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	

SMALL-SIGNAL TRANSISTOR

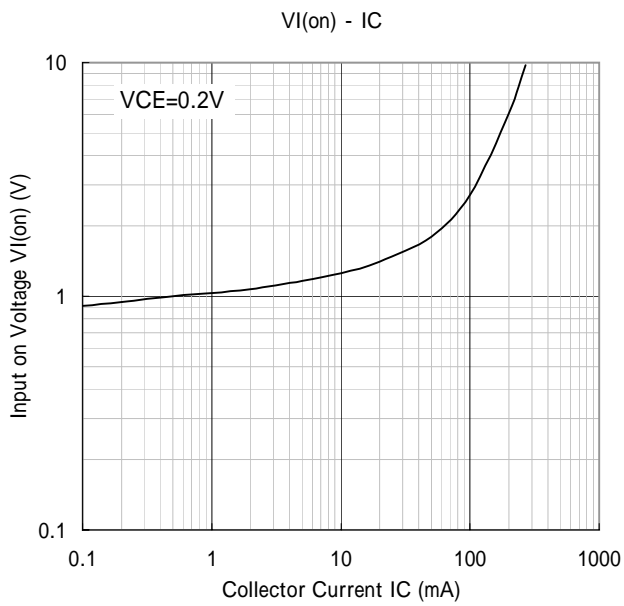
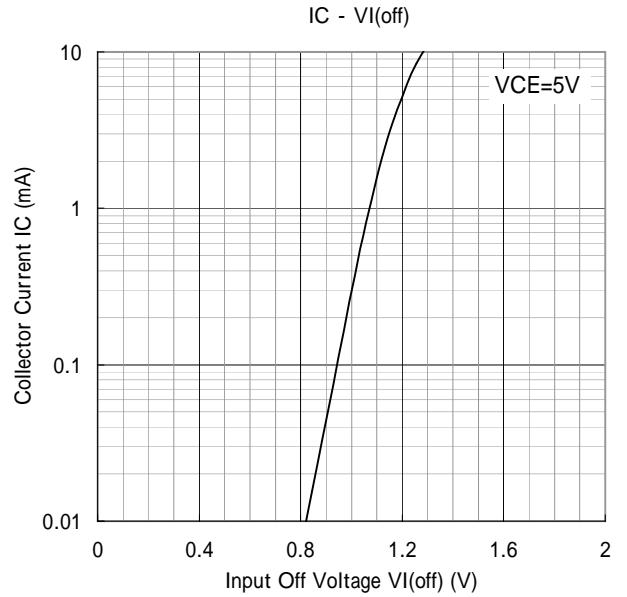
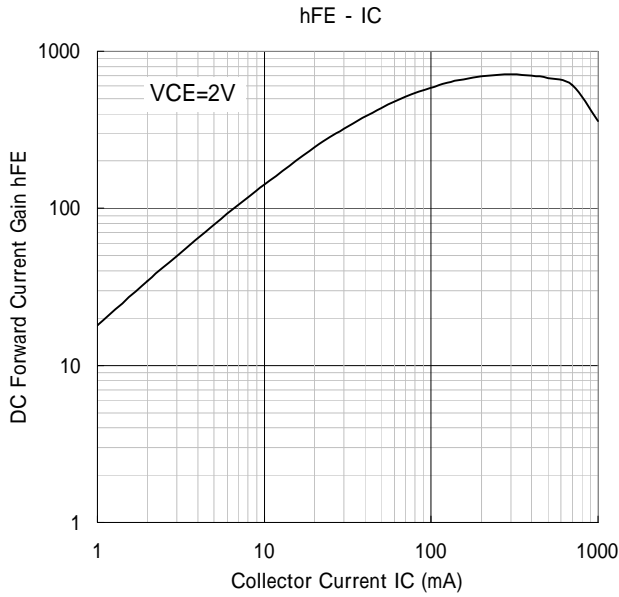
RTGN141AP

TRANSISTOR WITH RESISTOR
FOR SWITCHING APPLICATION
SILICON NPN EPITAXIAL TYPE

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
I_{CBO}	Collector cut off current	$V_{CB}=40V, I_E=0$			0.1	μA
V_{OL}	Output voltage	$V_I=5V, I_C=100mA$			0.2	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		7	10	13	K
R_2	Emitter – Base resistor		7	10	13	K

<SMALL-SIGNAL TRANSISTOR>
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 TRANSISTOR WITH RESISTOR
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Marketing division, Marketing planning department

6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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