## **RT5P234C**

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

## **DESCRIPTION**

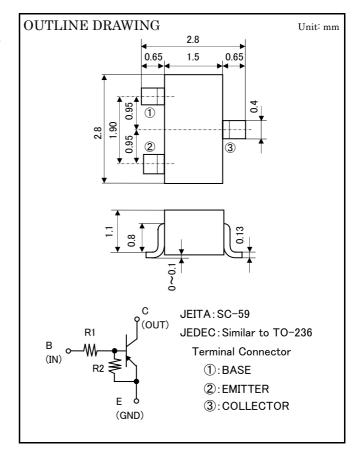
RT5P234C is a one chip transistor with built-in bias resistor, NPN type is RT5N234C.

#### **FEATURE**

Built-in bias resistor  $(R_1=2.2k\,\Omega\,,\,R_2=10k\,\Omega\,)$ High collector current (Ic=-0.5A) Mini package for easy mounting

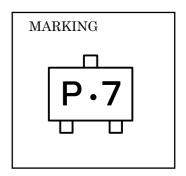
#### APPLICATION

Inverted circuit, Switching circuit, Interface circuit, Driver circuit



## MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT	
$V_{\mathrm{CBO}}$	Collector to Base voltage	-50	V	
$V_{\mathrm{EBO}}$	Emitter to Base voltage	-5	V	
$V_{\mathrm{IN}}$	Input voltage	-12	V	
$V_{\rm CEO}$	Collector to Emitter voltage	-50	V	
$I_{\mathrm{C}}$	Collector current	-500	mA	
Pc	Collector dissipation(Ta=25°C)	200	mW	
$T_{\rm j}$	Junction temperature	150	°C	
$T_{ m stg}$	Storage temperature	-55~+150	°C	



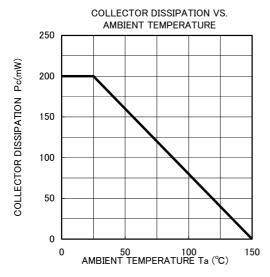
## ELECTRICAL CHARACTERISTICS (Ta=25°C)

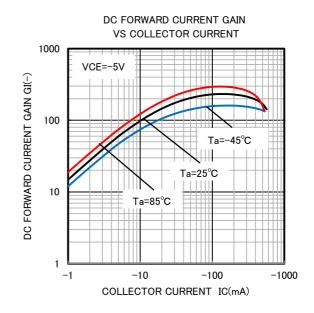
SYMBOL	PARAMETER	TEST CONDITION		LIMIT		
			MIN	TYP	MAX	UNIT
V <sub>I(on)</sub>	Input on voltage	V <sub>CE</sub> =-0.3V, I <sub>C</sub> =-20mA	_	_	-2.0	V
V <sub>I(off)</sub>	Input off voltage	V <sub>CE</sub> =-5V, I <sub>C</sub> =-100μA	-0.3	_	_	V
$V_{\mathrm{CE}(\mathrm{sat})}$	C to E saturation voltage	$I_C$ =-50mA, $I_B$ =-2.5mA	_	-0.1	-0.3	V
$I_{\mathrm{BE}}$	B to E current	$V_{ m BE}$ =-5 $V$	_	_	-3.6	mA
Ices	Collector cut off current	$V_{CE}$ =-50V, $V_{BE}$ =0V	_	_	-0.5	μΑ
$G_{\rm I}$	DC forward current gain	V <sub>CE</sub> =-5V, I <sub>C</sub> =-50mA	56	_	_	_
$R_1$	Input resistor	-	1.54	2.2	2.86	kΩ
R <sub>2</sub> /R <sub>1</sub>	Resistor ratio	_	3.6	4.5	5.5	_
$f_{\mathrm{T}}$	Gain band width product	V <sub>CE</sub> =-10V, I <sub>E</sub> =5mA, f=100MHz	_	150	_	MHz

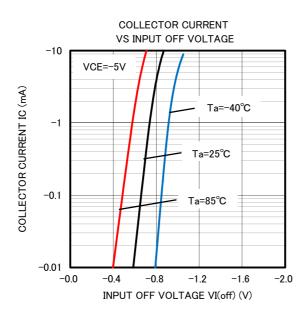
# **RT5P234C**

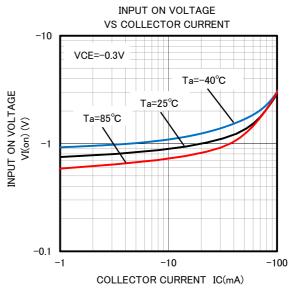
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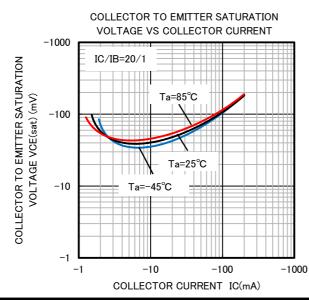
## TYPICAL CHARACTERISTICS













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