

# RT5P230C

Transistor With Resistor  
For Switching Application  
Silicon PNP Epitaxial Type

## DESCRIPTION

RT5P230C is a one chip transistor with built-in bias resistor, NPN type is RT5N230C.

## FEATURE

Built-in bias resistor ( $R_1=2.2k\Omega$ )

High collector current ( $I_C=0.5A$ )

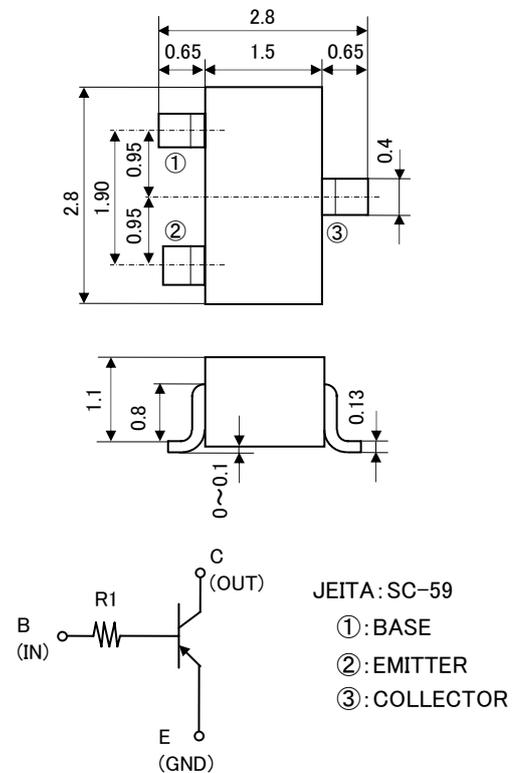
Mini package for easy mounting

## APPLICATION

Inverted circuit, Switching circuit, Interface circuit,  
Driver circuit

## OUTLINE DRAWING

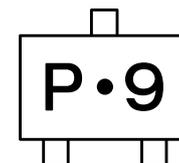
Unit: mm



## MAXIMUM RATING ( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	RATING	UNIT
$V_{CBO}$	Collector to Base voltage	-50	V
$V_{EBO}$	Emitter to Base voltage	-5	V
$V_{CEO}$	Collector to Emitter voltage	-50	V
$I_C$	Collector current	-500	mA
$P_C$	Collector dissipation( $T_a=25^\circ\text{C}$ )	200	mW
$T_j$	Junction temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage temperature	-55~+150	$^\circ\text{C}$

## MARKING



## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{CBO}$	C to B breakdown voltage	$I_C=-50\mu\text{A}$	-50	—	—	V
$V_{CEO}$	C to E breakdown voltage	$I_C=-1\text{mA}$	-50	—	—	V
$V_{EBO}$	E to B breakdown voltage	$I_E=-50\mu\text{A}$	-5	—	—	V
$I_{CBO}$	Collector cut off current	$V_{CB}=-50\text{V}$	—	—	-0.5	$\mu\text{A}$
$I_{EBO}$	Emitter cut off current	$V_{EB}=-4\text{V}$	—	—	-0.5	$\mu\text{A}$
$V_{CE(sat)}$	C to E saturation voltage	$I_C=-50\text{mA}$ , $I_B=-2.5\text{mA}$	—	—	-0.3	V
$G_1$	DC forward current gain	$V_{CE}=-5\text{V}$ , $I_C=-50\text{mA}$	100	250	600	—
$R_1$	Input resistor	—	1.54	2.2	2.86	$k\Omega$
$f_T$	Gain band width product	$V_{CE}=-10\text{V}$ , $I_E=50\text{mA}$ , $f=100\text{MHz}$	—	150	—	MHz



**Keep safety first in your circuit designs!**

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