# RT5N430C

Transistor With Resistor For Switching Application Silicon NPN Epitaxial Type

## **DESCRIPTION**

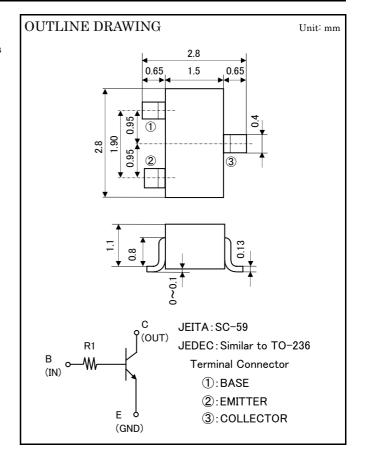
RT5N430C is a one chip transistor with built-in bias resistor, PNP type is RT5P430C.

### **FEATURE**

Built-in bias resistor ( $R_1$ =4.7k $\Omega$ ) High collector current (Ic=0.5A) Mini package for easy mounting

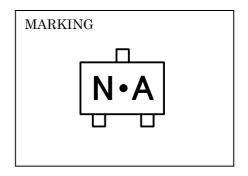
### **APPLICATION**

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	٧	
$V_{\mathrm{EBO}}$	Emitter to Base voltage	5	٧	
$V_{\rm CEO}$	Collector to Emitter voltage	50	V	
$I_{\mathrm{C}}$	Collector current	500	mA	
$P_{\rm C}$	Collector dissipation(Ta=25°C)	200	mW	
Tj	Junction temperature	+150	°C	
$T_{ m stg}$	Storage temperature	-55 <b>~</b> +150	°C	

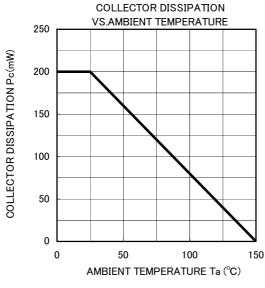


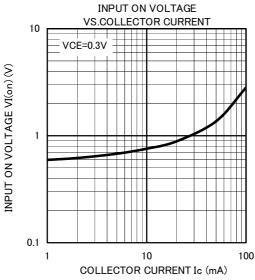
## ELECTRICAL CHARACTERISTICS (Ta=25°C)

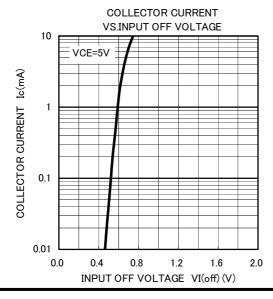
SYMBOL	PARAMETER	TEST CONDITION	LIMIT			TINITO
			MIN	TYP	MAX	UNIT
V <sub>CBO</sub>	C to B break down voltage	I <sub>C</sub> =50 μ A	50	_	_	٧
V <sub>CEO</sub>	C to E break down voltage	I <sub>C</sub> =1mA	50	1	1	٧
$V_{\mathrm{EBO}}$	E to B break down voltage	I <sub>E</sub> =50 μ A	5	_	_	٧
$I_{CBO}$	Collector cut off current	V <sub>CB</sub> =50V	_	_	0.5	μΑ
$I_{\mathrm{EBO}}$	Emitter cut off current	V <sub>EB</sub> =4V		1	0.5	μΑ
V <sub>CE(sat)</sub>	C to E saturation voltage	I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA	_	_	0.3	٧
$G_{\rm I}$	DC forward current gain	$V_{CE}$ =5V, $I_{E}$ =50mA	100	250	600	_
$R_1$	Input resistor	_	3.29	4.7	6.11	kΩ
$\mathbf{f}_{\mathrm{T}}$	Gain band width product	$V_{CE}$ =10V, $I_{E}$ =-50mA, f=100MHz		200		MHz

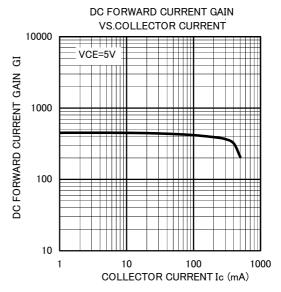
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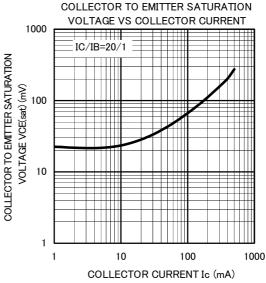
## TYPICAL CHARACTERISTICS(Ta=25°C)













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