RT5P431S

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

DESCRIPTION

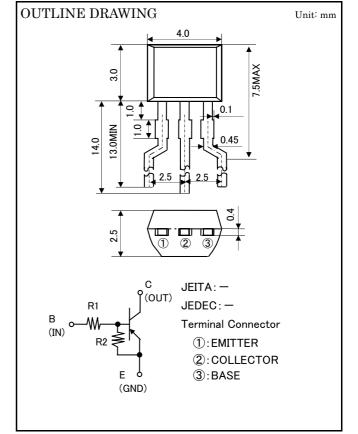
 $\rm RT5P431S$ is a one chip transistor with built-in bias resistor.

FEATURE

Built-in bias resistor $(R_1=4.7k\Omega, R_2=4.7k\Omega)$ High collector current (Ic=-0.5A) Mini package for easy mounting

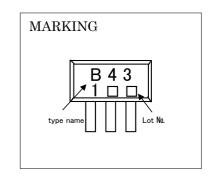
APPLICATION

Inverted circuit, Switching circuit, Interface circuit, Driver circuit



MAXIMUM RATING (Ta=25°C)

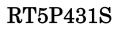
SYMBOL	PARAMETER	RATING	UNIT	
Vcbo	Collector to Base voltage	-50	V	
Vebo	Emitter to Base voltage	-10	V	
V _{CEO}	Collector to Emitter voltage	-50	V	
V _{IN}	Input voltage	-30	V	
Ic	Collector current	-500	mA	
Pc	Collector dissipation(Ta=25°C)	600	mW	
T_j	Junction temperature	+150	°C	
$T_{\rm stg}$	Storage temperature	-55~+150	°C	



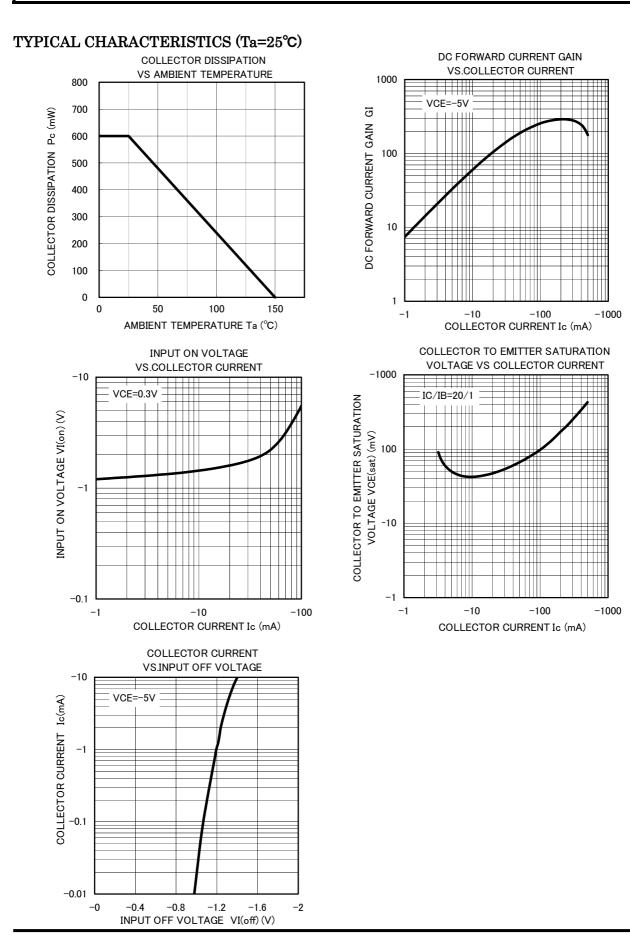
ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			
			MIN	TYP	MAX	UNIT
V I(on)	Input on voltage	V _{CE} =-0.3V, I _C =-20mA	_	_	-3	V
V I(off)	Input off voltage	V _{CE} =-5V, I _C =-100µA	-0.5	_	—	V
$V_{CE(sat)}$	C to E saturation voltage	Ic=-50mA, I _B =-2.5mA	_	_	-0.3	V
\mathbf{I}_{BE}	B to E current	V_{BE} =-5V	_	_	-1.8	mA
I _{CES}	Collector cut off current	V_{CE} =-50V, V_{BE} =0V	_	_	-0.5	μA
GI	DC forward current gain	V_{CE} =-5V, I _C =-50mA	47	_	—	_
R_1	Input resistor	—	3.29	4.7	6.11	kΩ
R_2/R_1	Resistor ratio	—	0.8	1.0	1.2	_
\mathbf{f}_{T}	Gain band width product	V_{CE} =-10V, I _E =5mA, f=100MHz	_	150	_	MHz

ISAHAYA ELECTRONICS CORPORATION



Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type



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

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