

RT3T1CU

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3T1CU is a composite transistor built with RT1N141 chip and RT1P136 chip in USM6F package.

FEATURE

- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

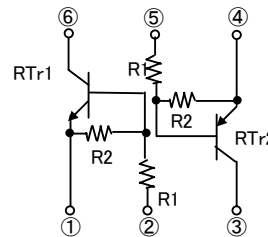
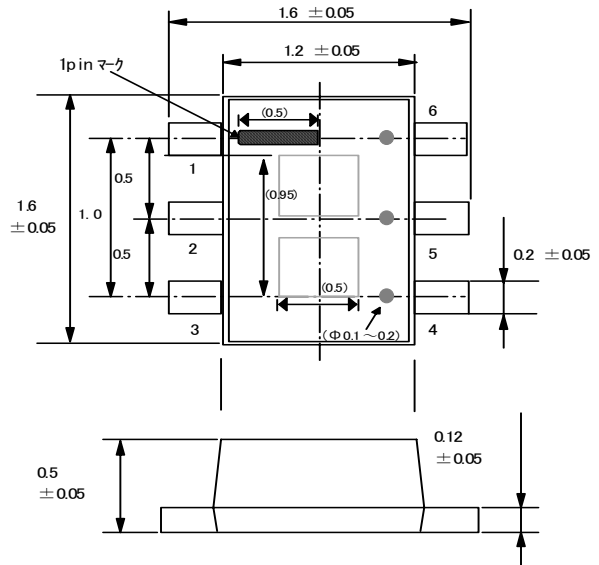
APPLICATION

- Inverted circuit, switching circuit,
- interface circuit, driver circuit

※PNP built in transistor of "—" sign is abbreviation.

OUTLINE DRAWING

Unit: mm



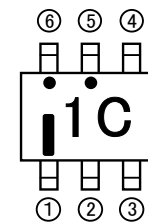
TERMINAL CONNECTOR
①: EMITTER1
②: BASE1
③: COLLECTOR2
④: EMITTER2
⑤: BASE2
⑥: COLLECTOR1

JEITA: —
ISAHAYA: USM6F

MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT
VCBO	Collector to Base voltage	50	V
VEBO	Emitter to Base voltage	Tr1	10
		Tr2	6
VCEO	Collector to Emitter voltage	50	V
IC	Collector current	100	mA
ICM	Peak Collector current	200	mA
PC	Collector dissipation (Total, Ta=25°C)	125	mW
Tj	Junction temperature	+150	°C
Tstg	Storage temperature	-55~+150	°C

MARKING



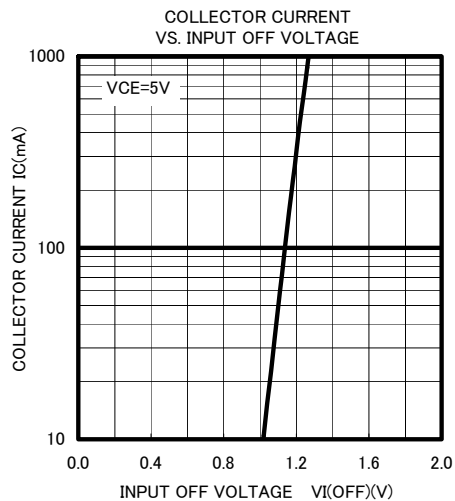
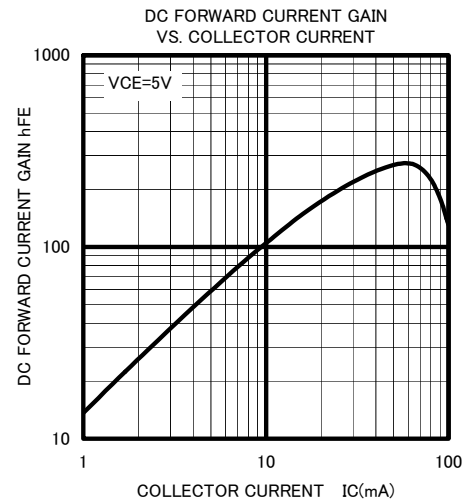
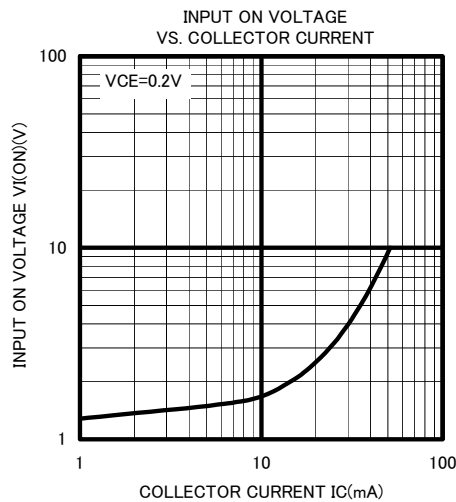
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ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)CEO	Collector to Emitter break down voltage	I _c =100μA, R _{BE} =∞	50			V
ICBO	Collector cut off current	V _{CB} =50V, I _E =0mA			0.1	μA
hFE	DC forward current gain	Tr1	V _{CE} =5V, I _C =10mA	50		-
		Tr2	V _{CE} =5V, I _C =5mA	33		
V _{CE(sat)}	Collector to Emitter saturation voltage	Tr1	I _C =10mA, I _B =0.5mA		0.1	V
		Tr2			0.3	
V _{I(ON)}	Input on voltage	Tr1	V _{CE} =0.2V, I _C =5mA		1.5	V
		Tr2			0.7	
V _{I(OFF)}	Input off voltage	Tr1	V _{CE} =5V, I _C =100μA	0.8	1.1	V
		Tr2		0.4	0.6	
R ₁	Input resistor	Tr1		7.0	10	KΩ
		Tr2		0.7	1.0	
R ₂ /R ₁	Resistor ratio	Tr1		0.9	1.0	-
		Tr2		8	10	
f _T	Gain band width product	Tr1	V _{CE} =6V, I _E =10mA		200	MHz
		Tr2			150	

TYPICAL CHARACTERISTICS (Tr1)

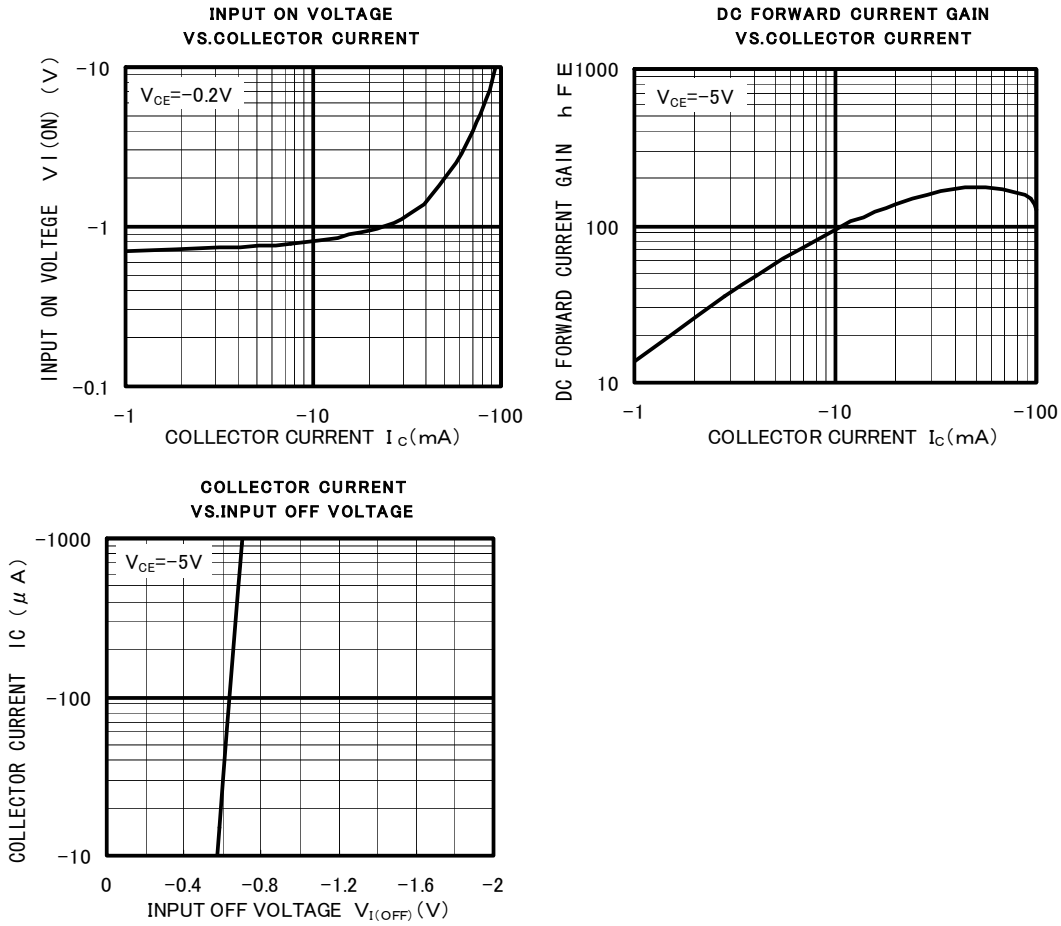


ISAHAYA ELECTRONICS CORPORATION

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TYPICAL CHARACTERISTICS (Tr2)



ISAHAYA ELECTRONICS CORPORATION



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