

RT3TDDU

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3TDDU is a composite transistor built with two RT1N237 chip and RT1P237 chip in SC-75A package.

FEATURE

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

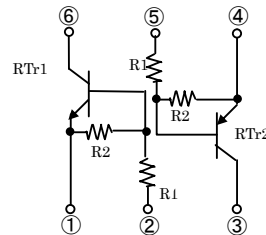
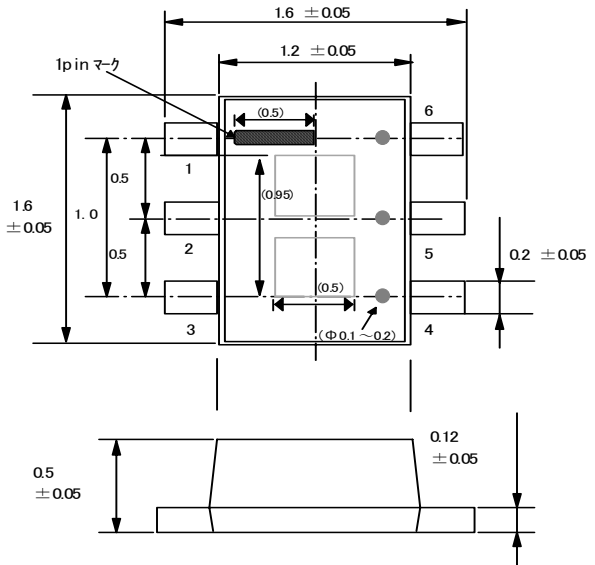
APPLICATION

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

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

OUTLINE DRAWING

Unit: mm



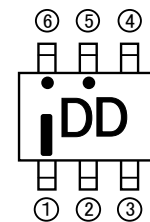
TERMINAL CONNECTOR
①: EMITTER1
②: BASE1
③: COLLECTOR2
④: EMITTER2
⑤: BASE2
⑥: COLLECTOR1

JEITA: —
ISAHAYA: USM6F

MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V _{CBO}	Collector to Base voltage	50	V
V _{EBO}	Emitter to Base voltage	6	V
V _{CEO}	Collector to Emitter voltage	50	V
V _{IN}	Input Voltage	12	V
I _C	Collector current	100	mA
I _{CM}	Peak Collector current	200	mA
P _C	Collector dissipation (Total, Ta=25°C)	125	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55~+150	°C

MARKING





Marketing division, Marketing planning department

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

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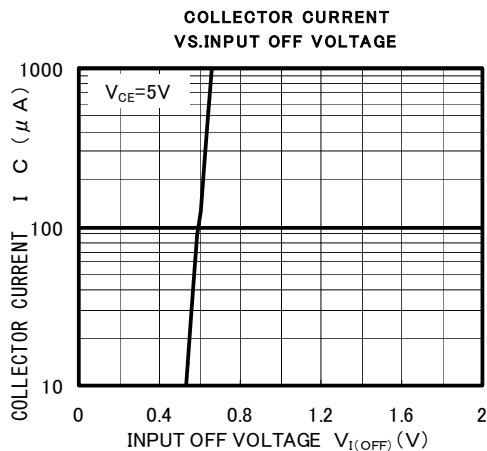
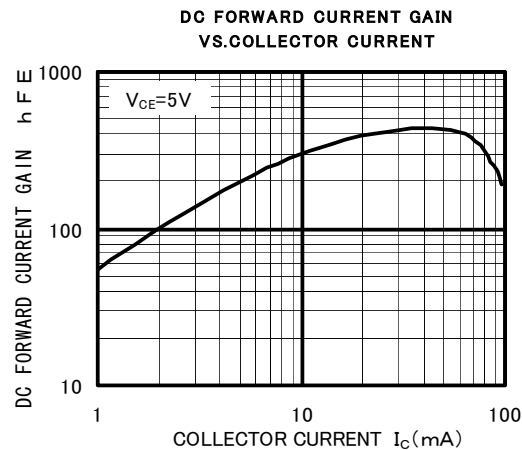
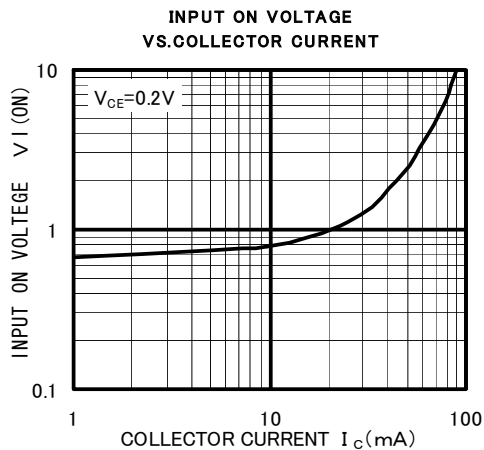
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 common)

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 _{CE} =50V, I _E =0			0.1	μA
hFE	DC forward current gain	V _{CE} =5V, I _C =10mA	80			-
VCE(sat)	Collector to Emitter saturation voltage	I _C =10mA, I _B =0.5mA		0.1	0.3	V
VI(ON)	Input on voltage	V _{CE} =0.2V, I _C =5mA		0.7	1.1	V
VI(OFF)	Input off voltage	V _{CE} =5V, I _C =100μA	0.5	0.6		V
R1	Input resistor		1.5	2.2	2.9	KΩ
R2/R1	Resistor ratio		17	22	26	-
fT	Gain band width product	Tr1	V _{CE} =6V, I _E =10mA	200		MHZ
		Tr2	V _{CE} =6V, I _E =10mA	150		

TYPICAL CHARACTERISTICS (Tr1)

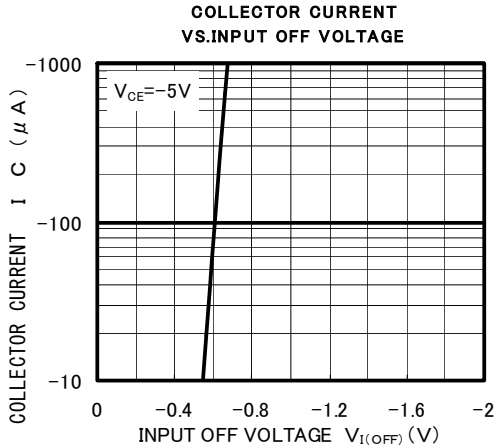
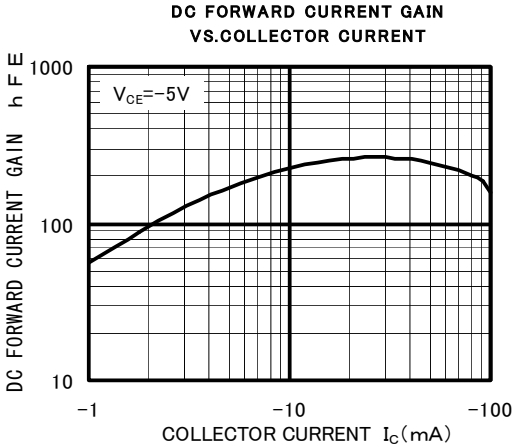
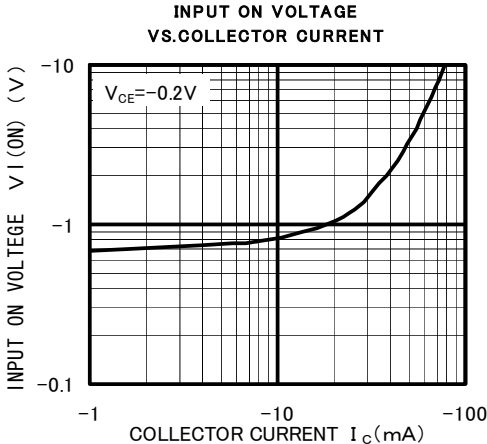


ISAHAYA ELECTRONICS CORPORATION

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TYPICAL CHARACTERISTICS (Tr2)





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