

# RT3T55U

Composite Transistor With Resistor  
For Switching Application  
Silicon Epitaxial Type

## DESCRIPTION

RT3T55U is a composite transistor built with RT1N144 chip and RT1P144 chip in USM6F package.

## FEATURE

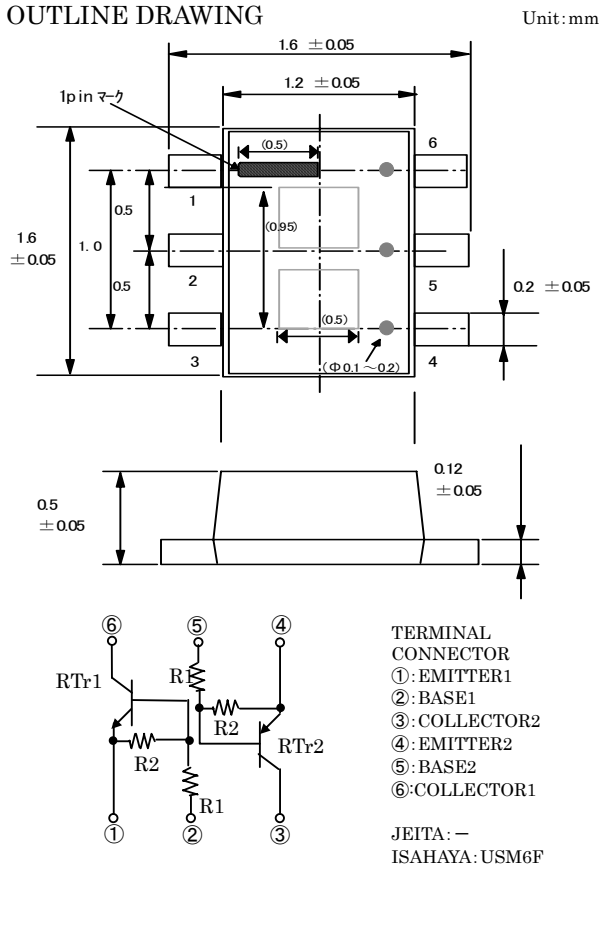
- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

## APPLICATION

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

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

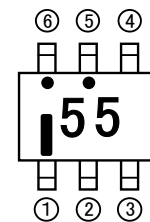
## OUTLINE DRAWING



## MAXIMUM RATING (Ta=25°C) (Tr1, Tr2 common)

SYMBOL	PARAMETER	RATING	UNIT
VCBO	Collector to Base voltage	50	V
VEBO	Emitter to Base voltage	6	V
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



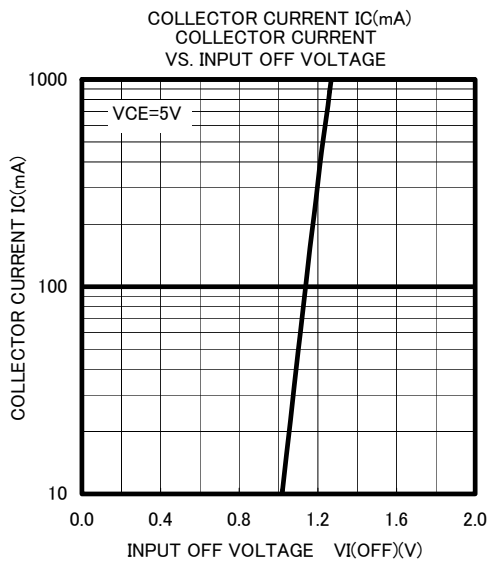
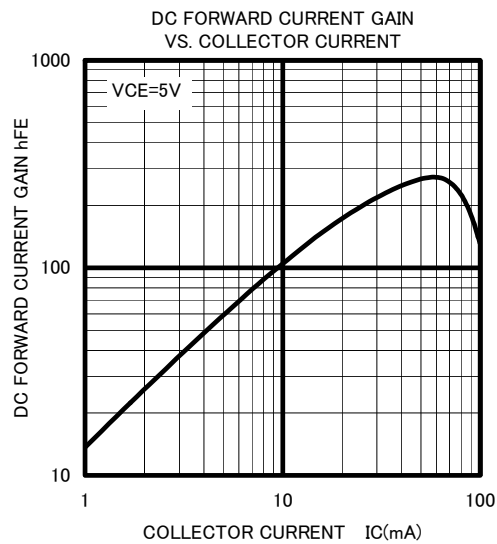
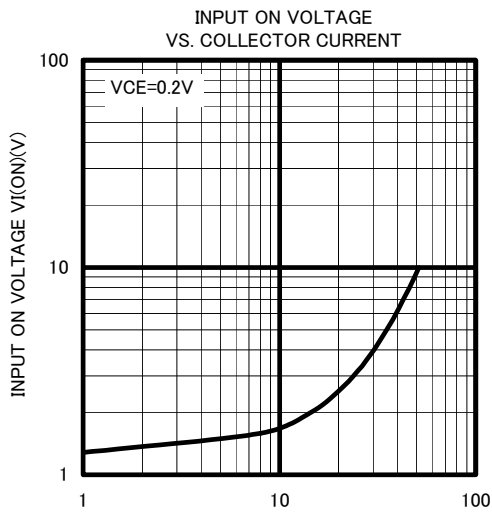
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## ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 common)

Symbol	Parameter	Test conditions	Limits			Unit	
			Min	Typ	Max		
V(BR)CEO	Collector to Emitter break down voltage	IC=100 μA, RBE=∞	50	-	-	V	
ICBO	Collector cut off current	VCB=50V, IE=0	-	-	0.1	μA	
hFE	DC forward current gain	VCE=5V, IC=5mA	50	-	-	-	
VCE(sat)	Collector to Emitter saturation voltage	IC=10mA, IB=0.5mA	-	0.1	0.3	V	
VI(ON)	Input on voltage	VCE=0.2V, IC=5mA	-	1.2	1.8	V	
VI(OFF)	Input off voltage	VCE=5V, IC=100 μA	0.4	0.7	-	V	
R1	Input resistor	-	7.0	10	13	kΩ	
R2/R1	Resistor ratio	-	4.2	4.7	5.1	-	
fT	Gain band width product	VCE=6V, IE=-10mA	Tr1	-	200	-	MHz
			Tr2	-	150	-	

## TYPICAL CHARACTERISTICS (Tr1)

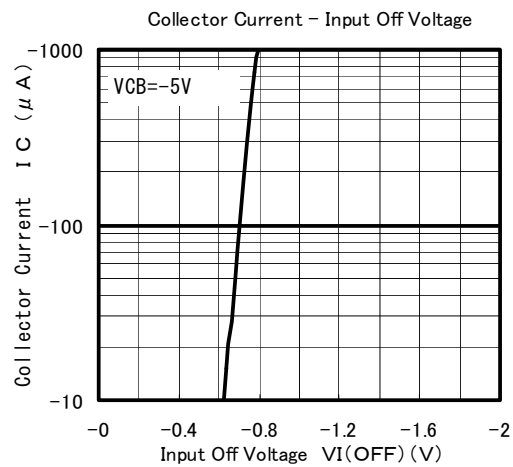
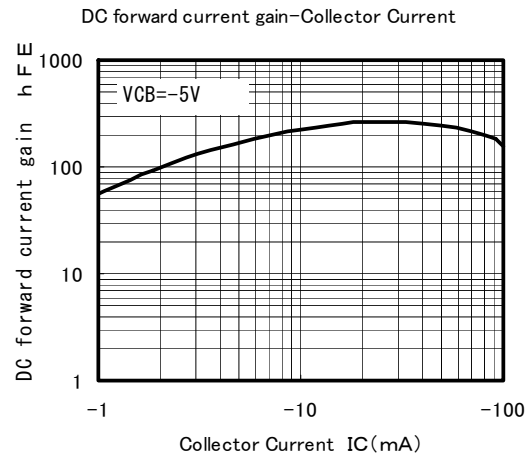
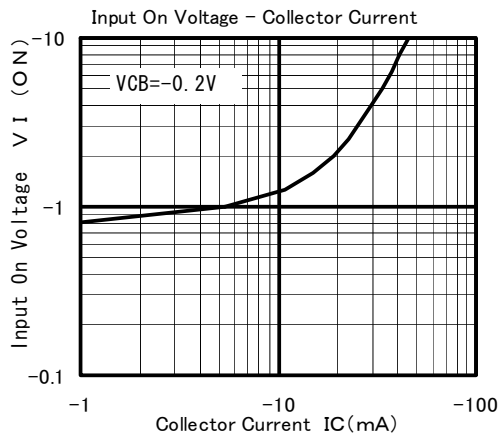


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## TYPICAL CHARACTERISTICS (Tr2)



ISAHAYA ELECTRONICS CORPORATION



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