

RT3TCCM

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3TCCM is a composite transistor built with RT1N136 chip and RT1P136 chip in SC-88 package.

FEATURE

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

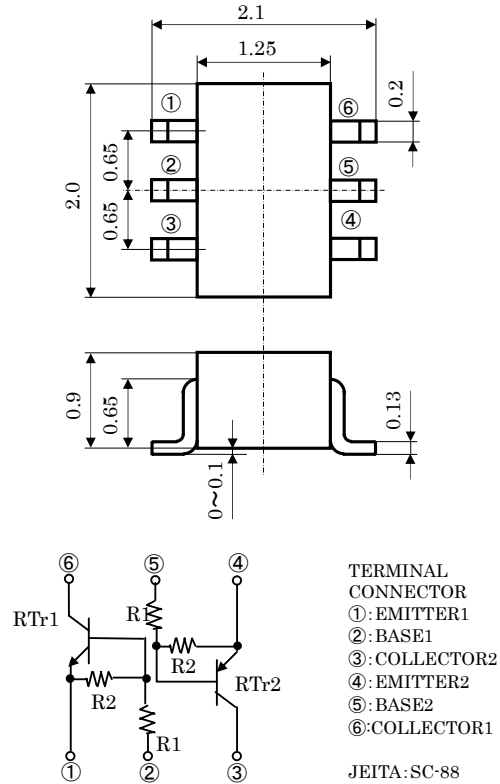
APPLICATION

Inverted circuit, switching circuit,
interface circuit, driver circuit

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

OUTLINE DRAWING

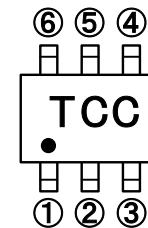
Unit: mm



MAXIMUM RATING ($T_a=25^\circ\text{C}$) (The characteristics apply to both Tr1 and Tr2)

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	10	V
I_C	Collector current	100	mA
I_{CM}	Peak Collector current	200	mA
P_C	Collector dissipation (Total, $T_a=25^\circ\text{C}$)	150	mW
T_j	Junction temperature	+150	$^\circ\text{C}$
T_{stg}	Storage temperature	-55~+150	$^\circ\text{C}$

MARKING



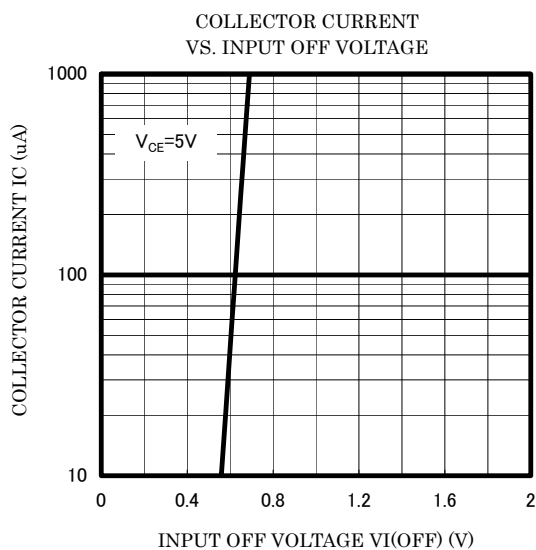
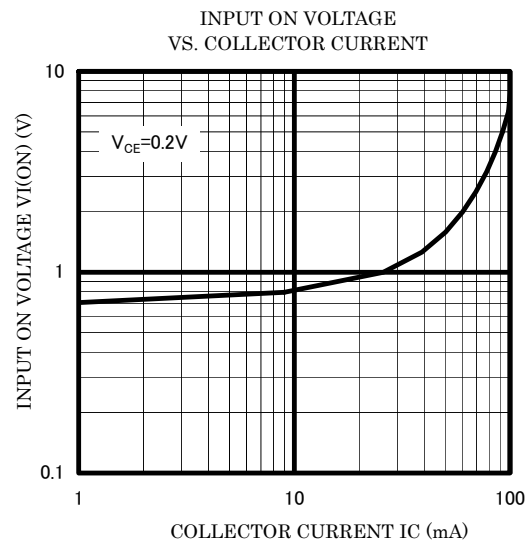
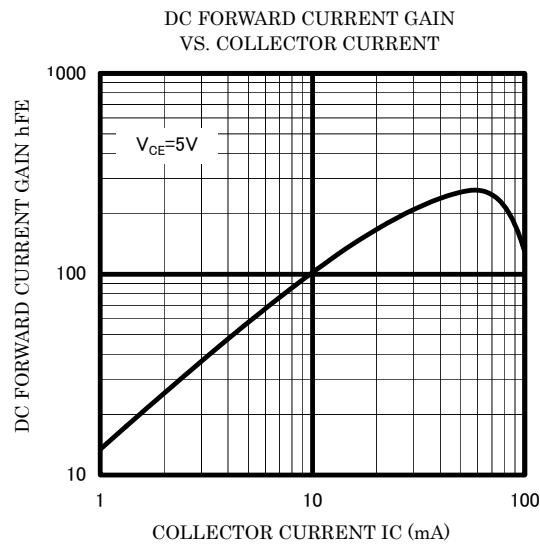
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ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit	
			Min	Typ	Max		
V(BR)CEO	Collector to Emitter break down voltage	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	33	-	-	-	
VCE(sat)	Collector to Emitter saturation voltage	IC=10mA, IB=0.5mA	-	-	0.3	V	
VI(ON)	Input on voltage	VCE=0.2V, IC=5mA	-	0.7	1.2	V	
VI(OFF)	Input off voltage	VCE=5V, IC=100 μA	0.4	0.6	-	V	
R1	Input resistor	-	0.7	1.0	1.3	kΩ	
R2/R1	Resistor ratio	-	8	10	12	-	
fT	Gain band width product	VCE=6V, IE=10mA	RTr1	-	200	-	MHz
			RTr2	-	150	-	

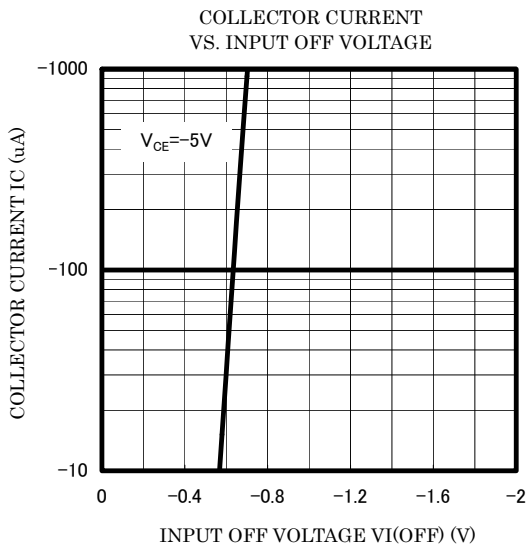
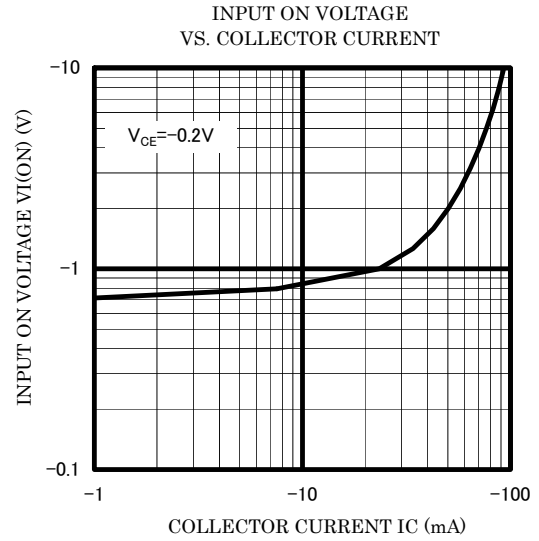
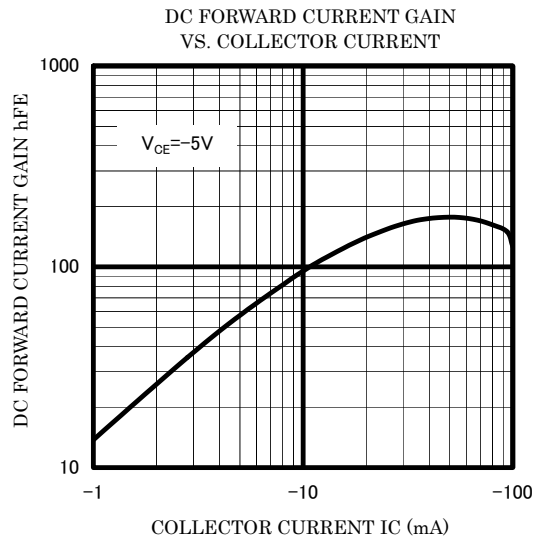
TYPICAL CHARACTERISTICS (RTr1)



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TYPICAL CHARACTERISTICS (RT_r2)





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