RT3T33M

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3T33M is a composite transistor built with RT1N441 chip and RT1P441 chip in SC-88 package.

FEATURE

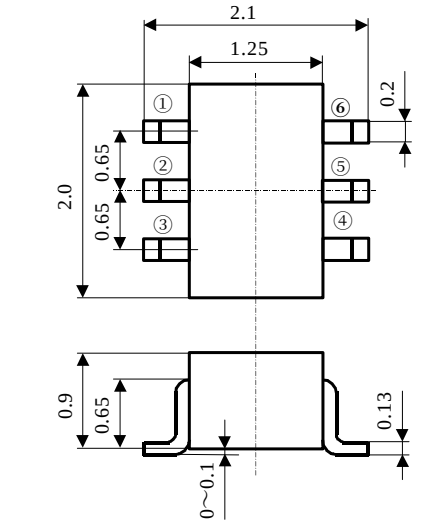
Silicon epitaxial type
Each transistor elements are independent.
Mini package for easy mounting

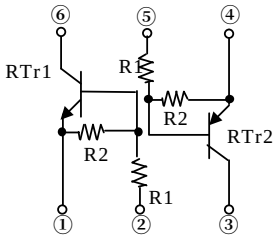
APPLICATION

Inverted circuit, switching circuit,
interface circuit, driver circuit

OUTLINE DRAWING

Unit : mm





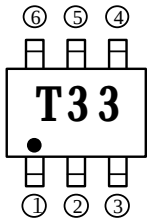
TERMINAL CONNECTOR
①: EMITTER1
②: BASE1
③: COLLECTOR2
④: EMITTER2
⑤: BASE2
⑥:COLLECTOR1

JEITA : SC-88

MAXIMUM RATING (Ta=25℃)

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
I_C	Collector current	100	mA
I_{CM}	Peak Collector current	200	mA
P_C	Collector dissipation (Total, Ta=25℃)	150	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	-55～+150	℃

MARKING



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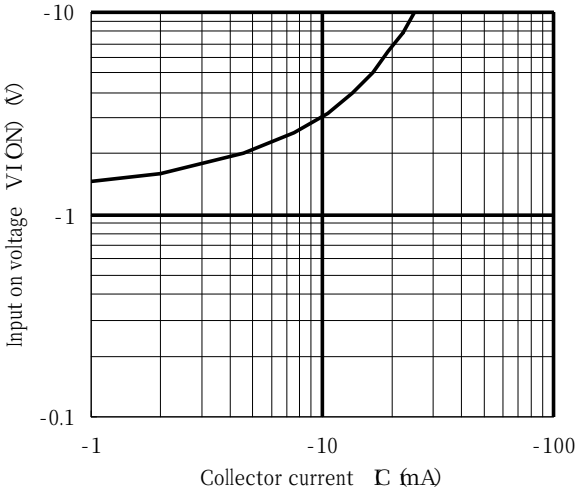
ELECTRICAL CHARACTERISTICS (Ta=25℃)

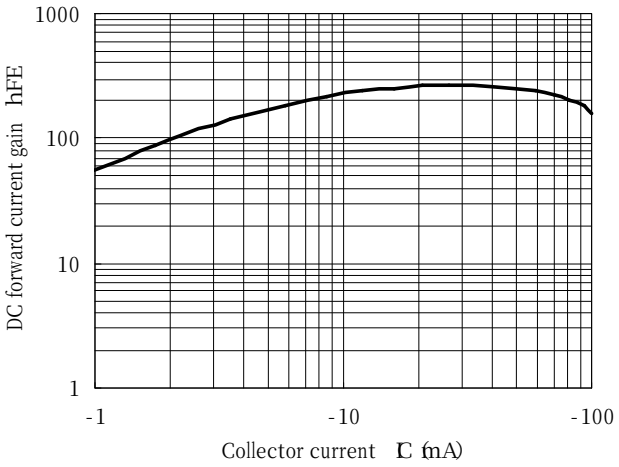
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	Collector to Emitter break down voltage	I_C=100μA,R_{BE}=∞	50	-	-	V
I_{CBO}	Collector cut off current	V_{CB}=50V,I_E=0	-	-	0.1	μA
h_{FE}	DC forward current gain	V_{CE}=5V,I_C=5mA	50	-	-	-
$V_{CE(sat)}$	Collector to Emitter saturation voltage	I_C=10mA,I_B=5mA	-	0.1	0.3	V
$V_{I(ON)}$	Input on voltage	V_{CE}=0.2V,I_C=5mA	-	2.2	5.0	V
$V_{I(OFF)}$	Input off voltage	V_{CE}=5V,I_C=100μA	0.8	1.1	-	V
R_1	Input resistor	-	33	47	61	kΩ
R_2/R_1	Resistor ratio	-	0.9	1.0	1.1	-
f_T	Gain band width product	V_{CE}=6V,I_E=-10mA	-	150	-	MH_Z

TYPICAL CHARACTERISTICS

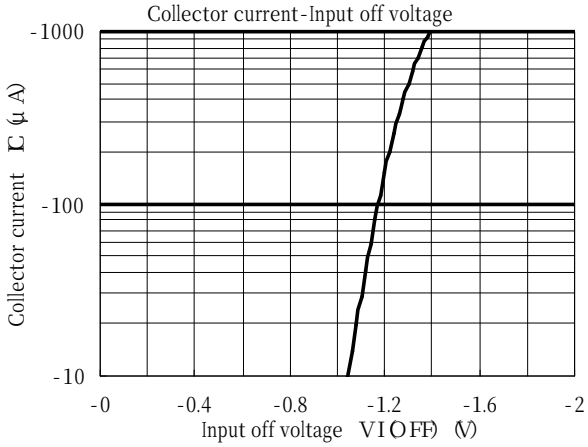
Input on voltage-Collector current



DC forward current gain-Collector current



Collector current-Input off voltage



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