RT3T33M

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

DESCRIPTION

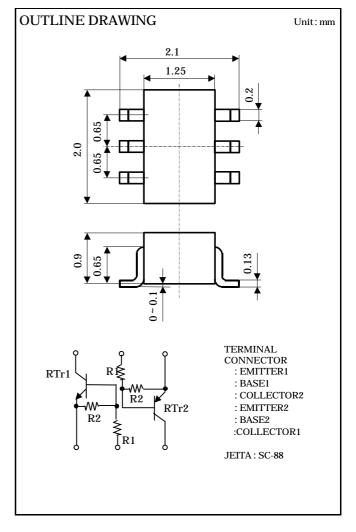
RT3T33M is a composite transistor built with RT1N441 chip and RT1P441 chip in SC-88 package.

FEATURE

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

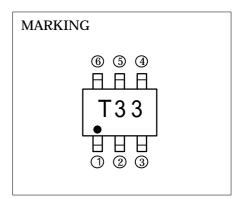
APPLICATION

Inverted circuit, switching circuit, interface circuit, driver circuit



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	
Тį	Junction temperature	+ 150		
T _{stg}	Storage temperature	-55 ~ +150		
T _i	•			



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ELECTRICAL CHARACTERISTICS (Ta=25)

Symbol	Parameter	Test conditions	Limits			11
			Min	Тур	Max	Unit
V _{(BR)CEO}	Collector to Emitter break down voltage	I_{C} =100 µ A,R _{BE} =	50	-	-	V
I _{CBO}	Collector cut off current	$V_{CB} = 50V, I_{E} = 0$	-	-	0.1	μA
\mathbf{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 =100 µ A	0.8	1.1	-	V
R ₁	Input resistor	-	33	47	61	k
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	-	MHz

TYPICAL CHARACTERISTICS

-100

-10 - 0

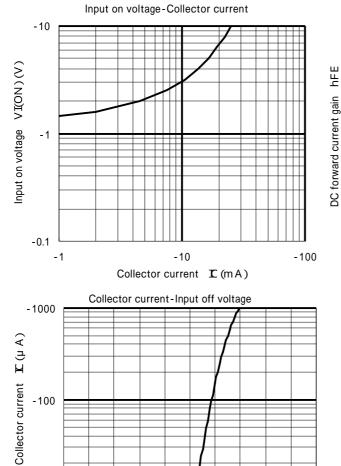
-0.4

-0.8

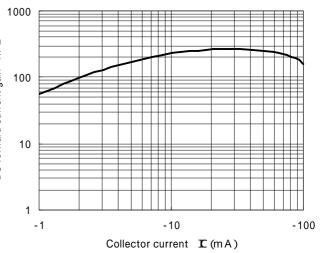
-1.2

Input off voltage VI(OFF) (V)

-1.6



DC forward current gain-Collector current



-2



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