RT3YA7M

Composite Transistor
For Muting Application

DESCRIPTION

RT3YA7M is a composite transistor built with RT1P140 and two muting transistor with resistor in SC-88 package.

FEATURE

・RT3Y97M is built in RTr1 side RT1P140,and RTr2,RTr3 side composite muting transistor with resistor.

・Built-in bias resistor　RTr1:R1=10kΩ　RTr2,RTr3:R1=4.7kΩ

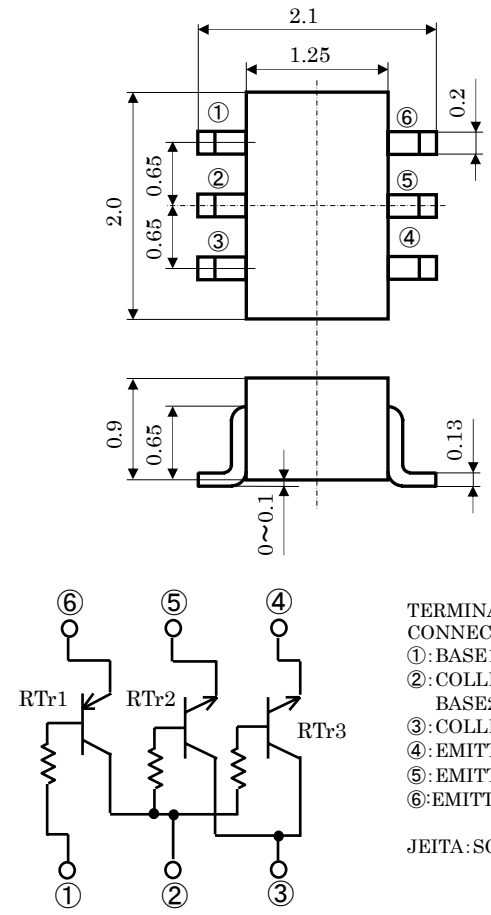
・Mini package for easy mounting

APPLICATION

muting circuit、switching circuit

OUTLINE DRAWING

Unit:mm



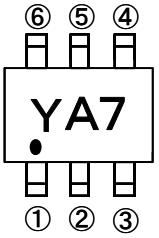
TERMINAL CONNECTOR
①:BASE1
②:COLLECTOR1
BASE2,3
③:COLLECTOR2,3
④:EMITTER3
⑤:EMITTER2
⑥:EMITTER1

JEITA:SC-88

MAXIMUM RATING (Ta=25℃)

SYMBOL	PARAMETER	RTr1 RATING	RTr2,RTr3 RATING	UNIT
V_{CBO}	Collector to Base voltage	-9	40	V
V_{EBO}	Emitter to Base voltage	-50	40	V
V_{CEO}	Collector to Emitter voltage	-9	15	V
I_C	Collector current	-100	200	mA
$P_{C(Total)}$	Collector dissipation(Ta=25□)	150		mW
T_j	Junction temperature	＋150		℃
T_{stg}	Storage temperature	-55～+150		℃

MARKING



Electrical characteristics (Ta=25℃) (RTr1side)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V_{CBO}	Collector-base breakdown voltage	I_C=-50 μA , I_E=0mA	-9			V
V_{EBO}	Emitter-base breakdown voltage	I_E=-50 μA , I_C=0mA	-50			V
V_{CEO}	Collector-emitter breakdown voltage	I_C=-1mA , R_{BE}=∞	-9			V
I_{CBO}	Collector cutoff current	V_{CB}=-6V , I_E=0mA			-0.1	μA
I_{EBO}	Emitter cutoff current	V_{EB}=-50V , I_C=0mA			-0.1	μA
h_{FE}	DC current transfer ratio	V_{CE}=-5V , I_C=-1mA		10		-
R1	Input resistance	-		10		KΩ

Electrical characteristics (Ta=25℃) (RTr2,RTr3 common)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V_{CBO}	Collector-base breakdown voltage	I_C=50 μA , I_E=0mA	40			V
V_{EBO}	Emitter-base breakdown voltage	I_E=50 μA , I_C=0mA	40			V
V_{CEO}	Collector-emitter breakdown voltage	I_C=1mA , R_{BE}=∞	15			V
I_{CBO}	Collector cutoff current	V_{CB}=40V , I_E=0mA			0.5	μA
I_{EBO}	Emitter cutoff current	V_{EB}=40V , I_C=0mA			0.5	μA
h_{FE}	DC current transfer ratio	V_{CE}=5V , I_C=10mA	820		2500	-
VCE(sat)	Collector-emitter saturation voltage	I_C=50mA , I_B=5mA			100	mV
R1	Input resistance	-		4.7		KΩ
fT	Transition frequency	V_{CE}=6V , I_E=-10mA		58		MHz
Ron	Output On-resistance	V_{IN}=3V, f=1MHz		1.8		Ω

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