

RT3WLMM

Composite Transistor
For Low Frequency Amplify Application
Silicon Epitaxial Type

DESCRIPTION

RT3WLMM is a composite transistor built with 2SC3052 chip and 2SA1235A chip in SC-88 package.

FEATURE

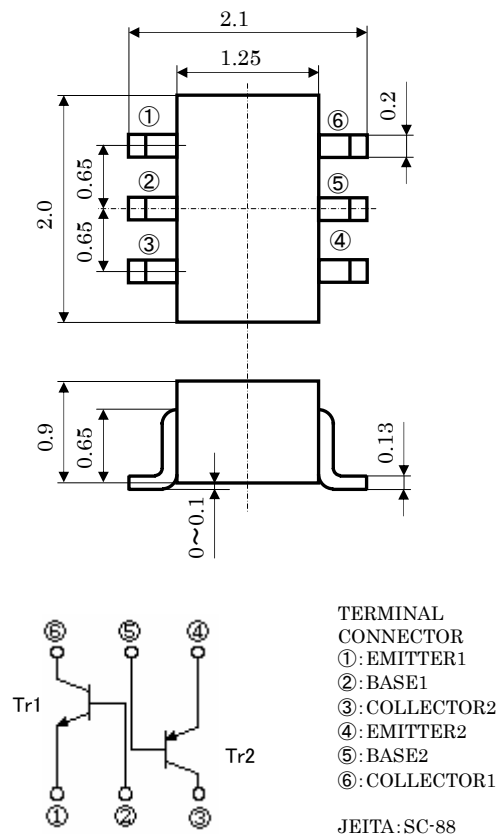
- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

APPLICATION

For low frequency amplify application

OUTLINE DRAWING

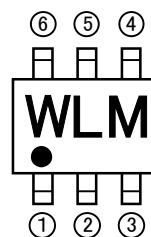
Unit: mm



MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING		UNIT
		Tr1	Tr2	
VCBO	Collector to Base voltage	50	60	V
VEBO	Emitter to Base voltage	6		V
VCEO	Collector to Emitter voltage	50		V
IC	Collector current	200		mA
PC(Total)	Collector dissipation (Ta=25°C)	150		mW
Tj	Junction temperature	+125		°C
Tstg	Storage temperature	-55~+125		°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	I _C =100 μA, R _{BE} =∞	50	-	-	V
I _{CBO}	Collector cut off current	V _{CB} =50V, I _E =0	-	-	0.1	μA
I _{EBO}	Emitter cut off current	V _{EB} =6V, I _C =0	-	-	0.1	μA
h _{FE} *	DC forward current gain	V _{CE} =6V, I _C =1mA	150	-	500	-
h _{FE}	DC forward current gain	V _{CE} =6V, I _C =0.1mA	90	-	-	-
V _{CE(sat)}	Collector to Emitter saturation voltage	I _C =100mA, I _B =10mA	-	-	0.3	V
f _T	Gain band width product	V _{CE} =6V, I _E =10mA	-	200	-	MHz
C _{ob}	Collector output capacitance	(Tr1) V _{CB} =6V, I _E =0, f=1MHz	-	2.5	-	pF
		(Tr2) V _{CB} =6V, I _E =0, f=1MHz	-	4.0	-	
NF	Noise figure	(Tr1) V _{CE} =6V, I _E =0.1mA, f=1kHz, R _G =2kΩ	-	-	15	dB
		(Tr2) V _{CE} =6V, I _E =0.3mA, f=100Hz, R _G =10kΩ	-	-	20	

* : It shows h_{FE} classification in right table.

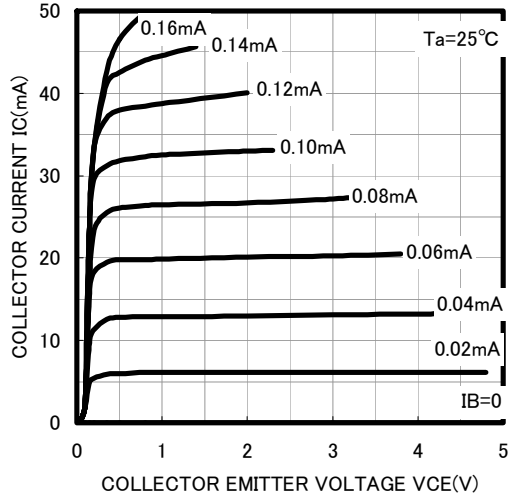
Item	E	F
h _{FE}	150~300	250~500

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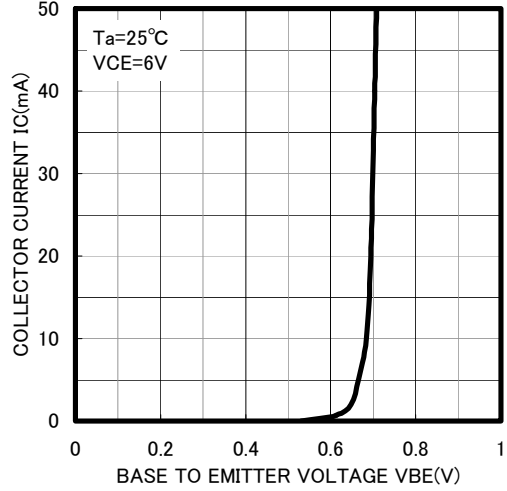
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TYPICAL CHARACTERISTICS (Tr1)

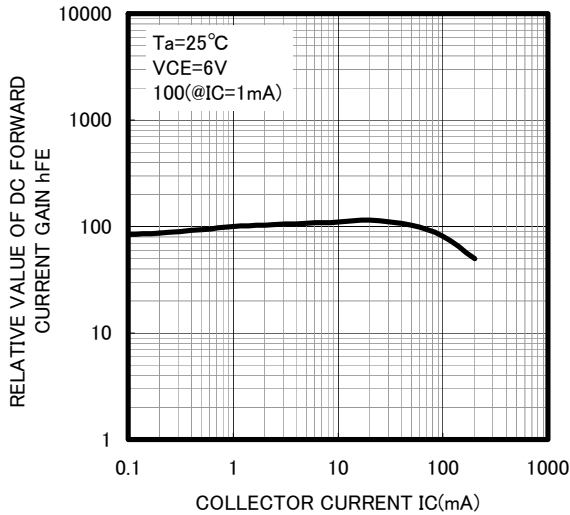
COMMON EMITTER OUTPUT



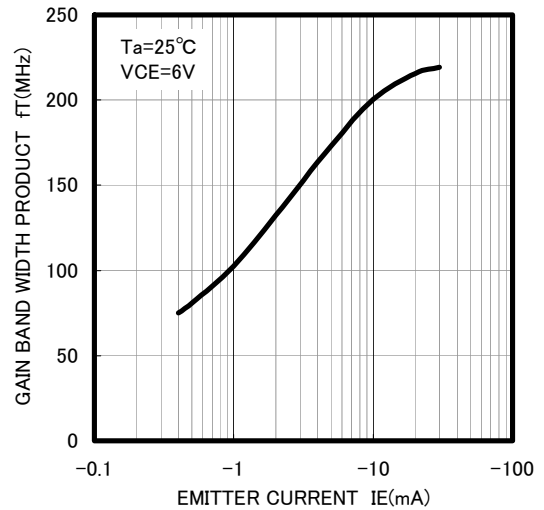
COMMON EMITTER TRANSFER



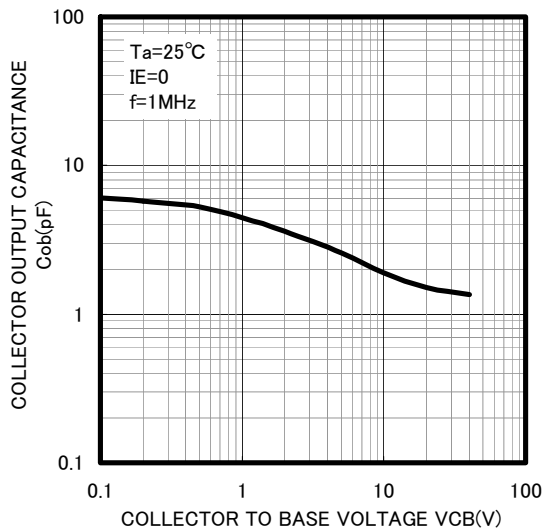
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



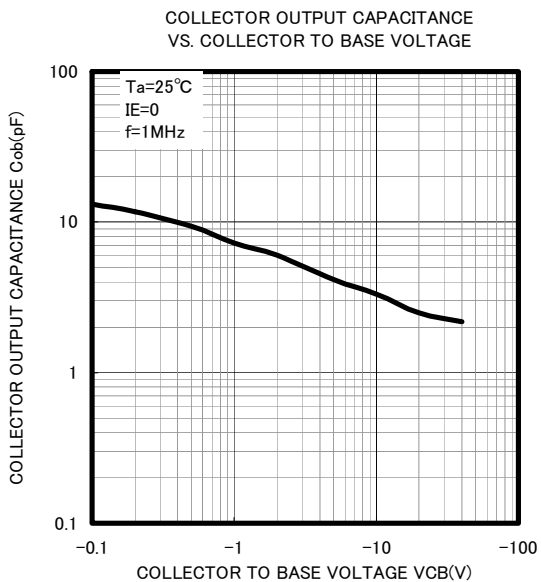
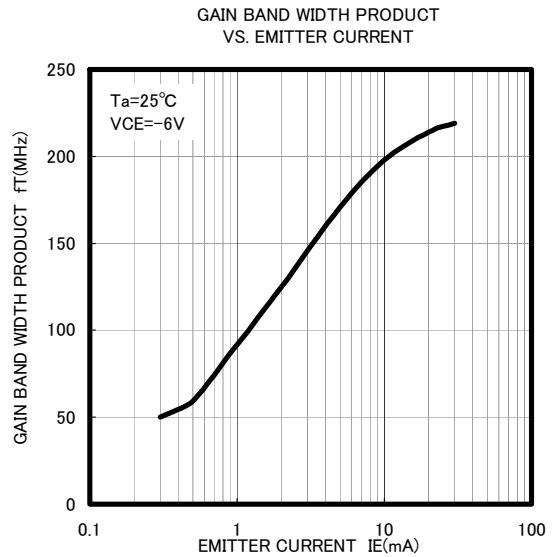
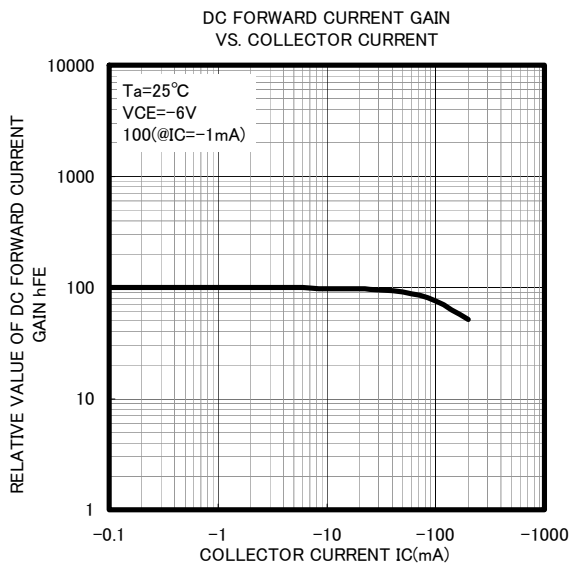
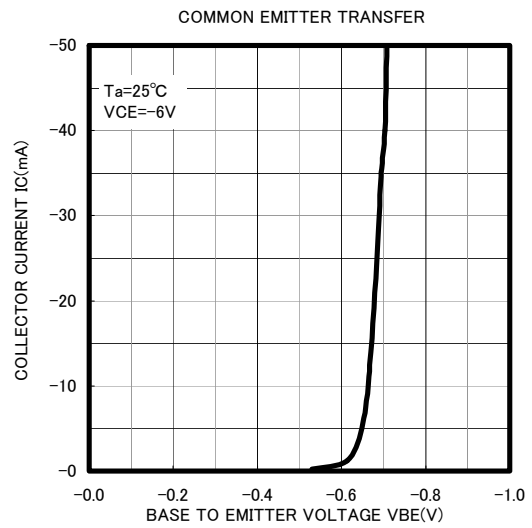
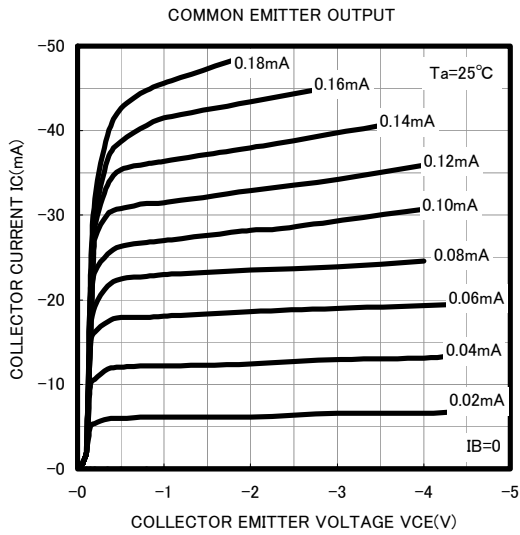
COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE



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TYPICAL CHARACTERISTICS (Tr2)





Marketing division, Marketing planning department

6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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