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

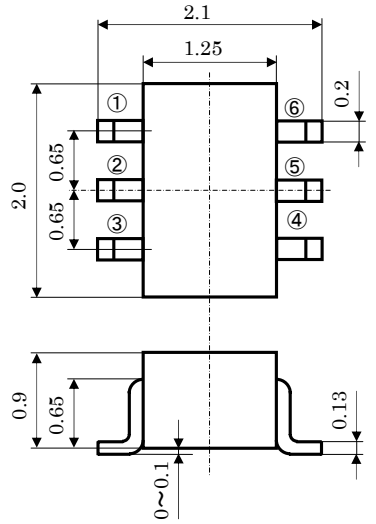
Silicon epitaxial type
Each transistor elements are independent.
Mini package for easy mounting

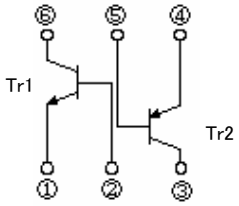
APPLICATION

For low frequency amplify application

OUTLINE DRAWING

Unit:mm





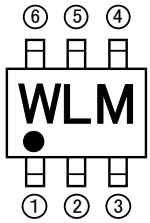
TERMINAL CONNECTOR
①:EMITTER1
②:BASE1
③:COLLECTOR2
④:EMITTER2
⑤:BASE2
⑥:COLLECTOR1

JEITA:SC-88

MAXIMUM RATING (Ta=25℃)

SYMBOL	PARAMETER	RATING		UNIT
		Tr1	Tr2	
V_{CBO}	Collector to Base voltage	50	60	V
V_{EBO}	Emitter to Base voltage	6		V
V_{CEO}	Collector to Emitter voltage	50		V
I_C	Collector current	200		mA
$P_{C(Total)}$	Collector dissipation (Ta=25℃)	150		mW
T_j	Junction temperature	+125		℃
T_{stg}	Storage temperature	-55～+125		℃

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25℃)

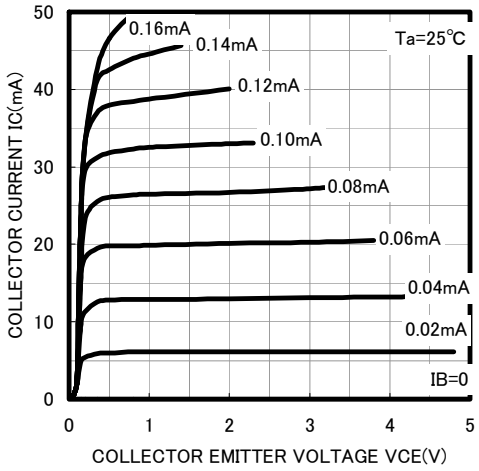
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	Collector to Emitter break down voltage	I_C=100μA,R_{BE}=∞	50	-	-	V
I_{CBO}	Collector cut off current	V_{CB}=50V,I_E=0	-	-	0.1	μA
I_{EBO}	Emitter cut off current	V_{EB}=6V,I_C=0	-	-	0.1	μA
h_{FE}*	DC forward current gain	V_{CE}=6V,I_C=1mA	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.

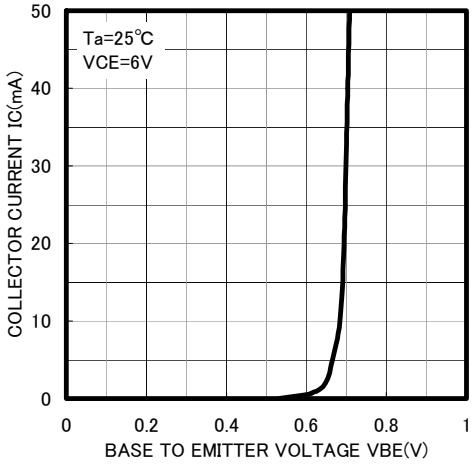
Item	E	F
hFE	150～300	250～500

TYPICAL CHARACTERISTICS (Tr1)

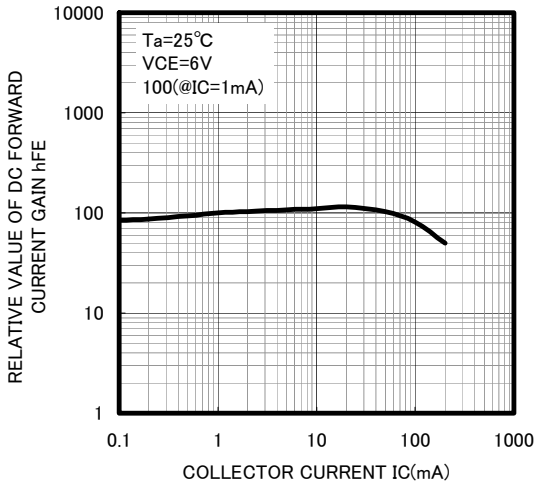
COMMON EMITTER OUTPUT



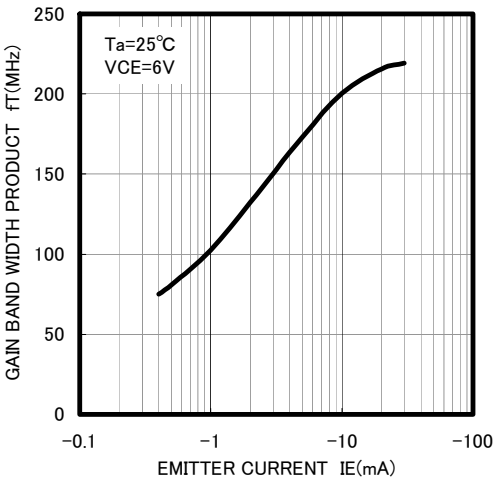
COMMON EMITTER TRANSFER



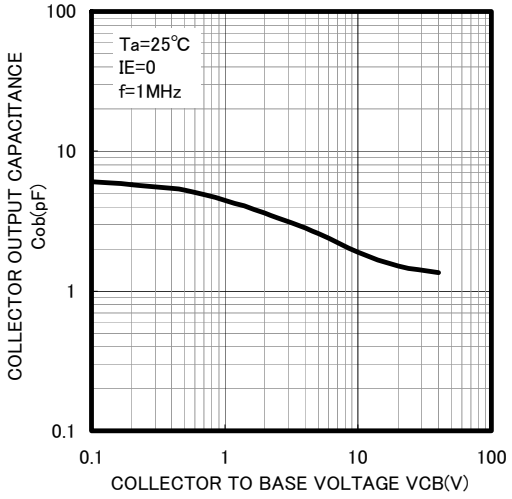
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT

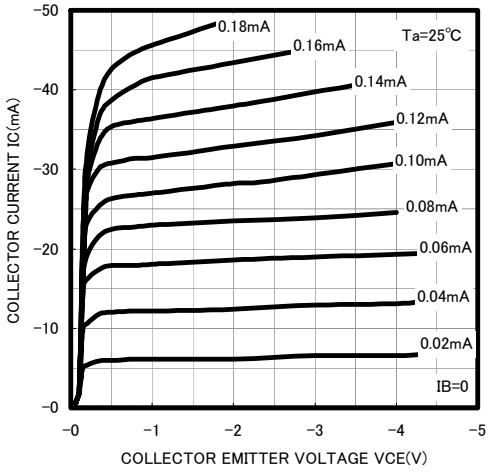


COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE

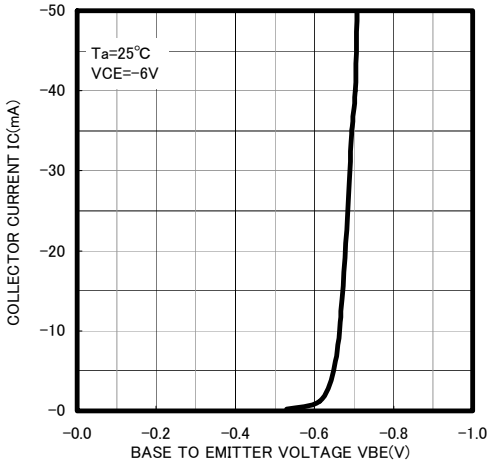


TYPICAL CHARACTERISTICS (Tr2)

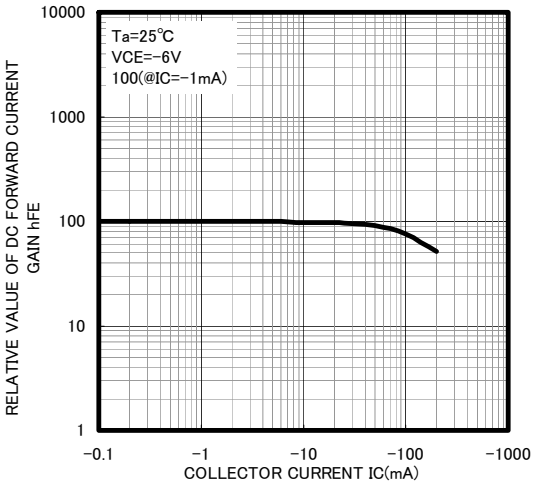
COMMON EMITTER OUTPUT



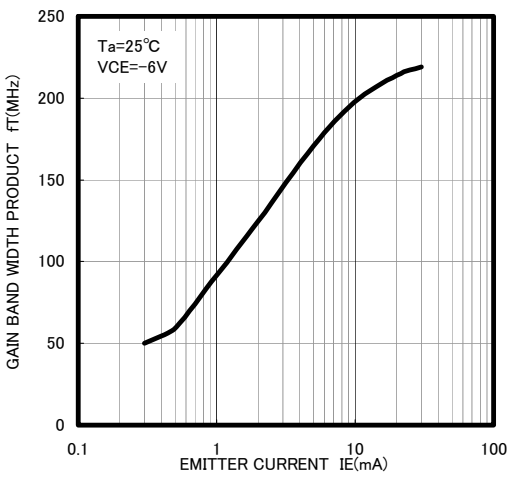
COMMON EMITTER TRANSFER



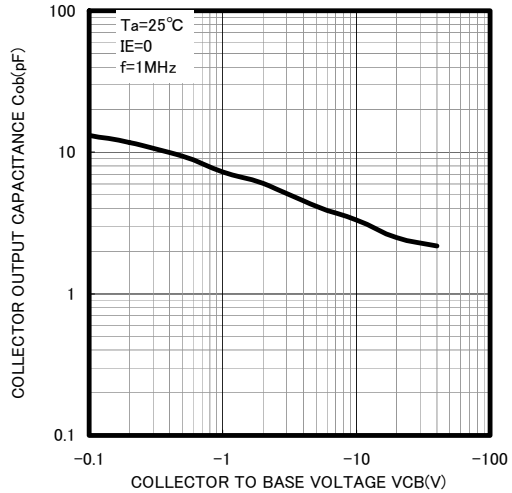
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE



ISAHAYA ELECTRONICS CORPORATION

Marketing division, Marketing planning department

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

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Jan.2003