

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

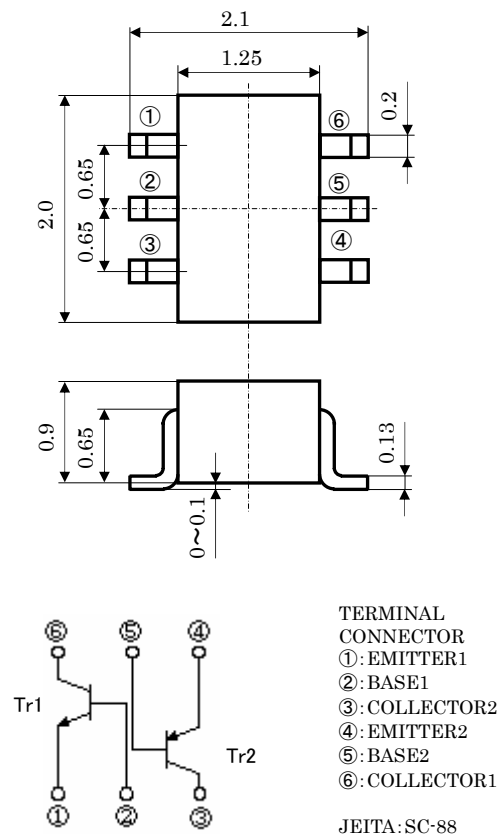
- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

APPLICATION

For low frequency amplify application

OUTLINE DRAWING

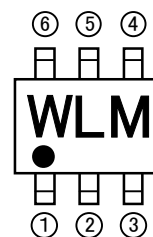
Unit: mm



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	$I_C=100\mu A, R_{BE}=\infty$	50	-	-	V
ICBO	Collector cut off current	$V_{CB}=50V, I_E=0$	-	-	0.1	μA
IEBO	Emitter cut off current	$V_{EB}=6V, I_C=0$	-	-	0.1	μA
hFE*	DC forward current gain	$V_{CE}=6V, I_C=1mA$	150	-	500	-
hFE	DC forward current gain	$V_{CE}=6V, I_C=0.1mA$	90	-	-	-
VCE(sat)	Collector to Emitter saturation voltage	$I_C=100mA, I_B=10mA$	-	-	0.3	V
fT	Gain band width product	$V_{CE}=6V, I_E=10mA$	-	200	-	MHz
Cob	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) $V_{CE}=6V, I_E=0.1mA, f=1kHz, R_G=2k\Omega$	-	-	15	dB
		(Tr2) $V_{CE}=-6V, I_E=0.3mA, f=100Hz, R_G=10k\Omega$	-	-	20	

* : It shows hFE classification in right table.

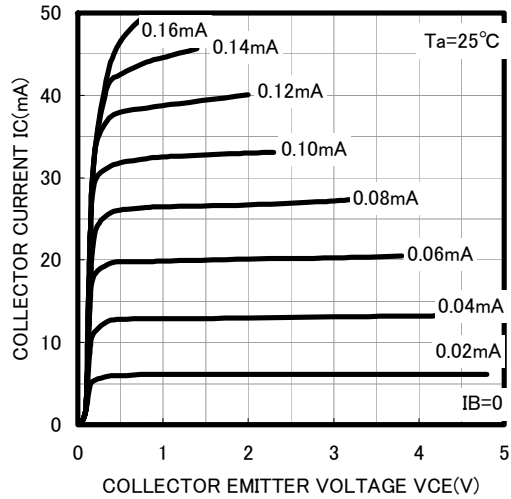
Item	E	F
hFE	150~300	250~500

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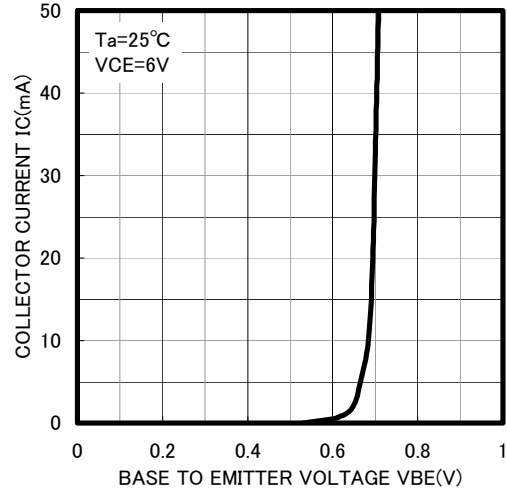
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TYPICAL CHARACTERISTICS (Tr1)

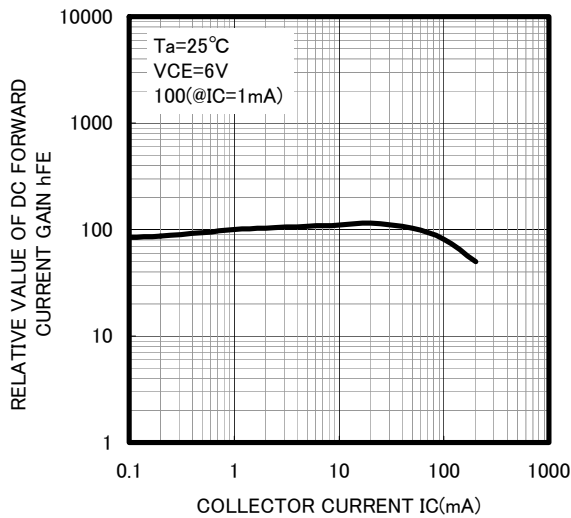
COMMON EMITTER OUTPUT



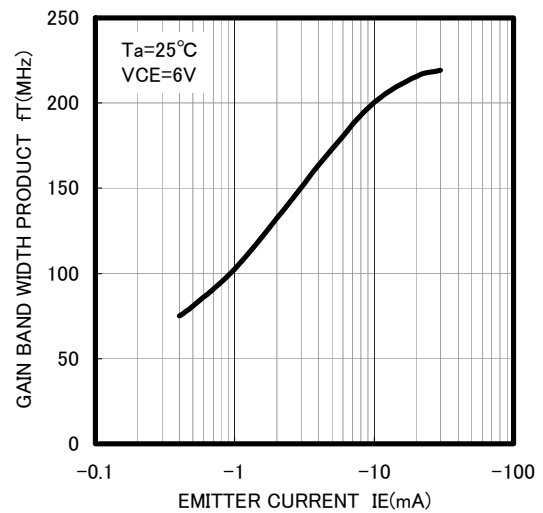
COMMON EMITTER TRANSFER



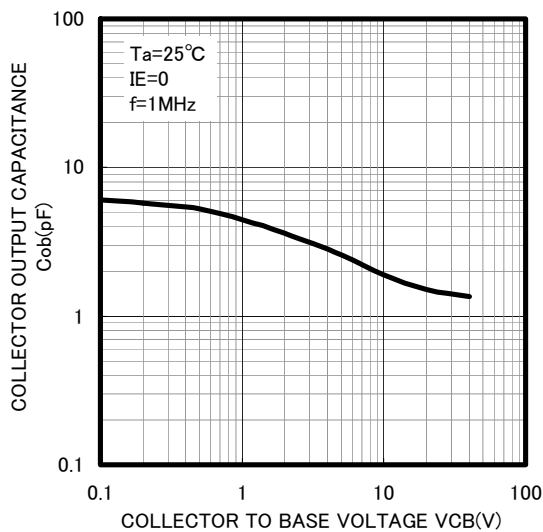
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE

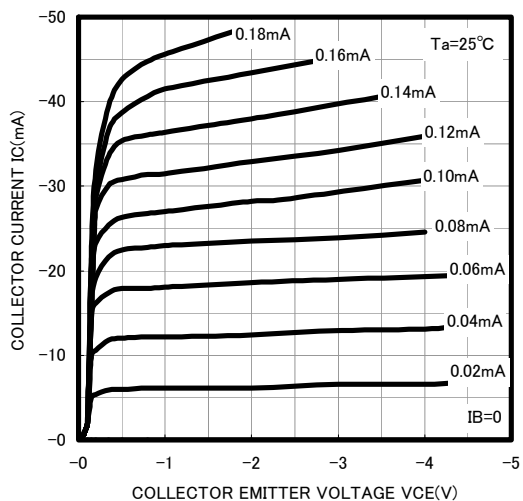


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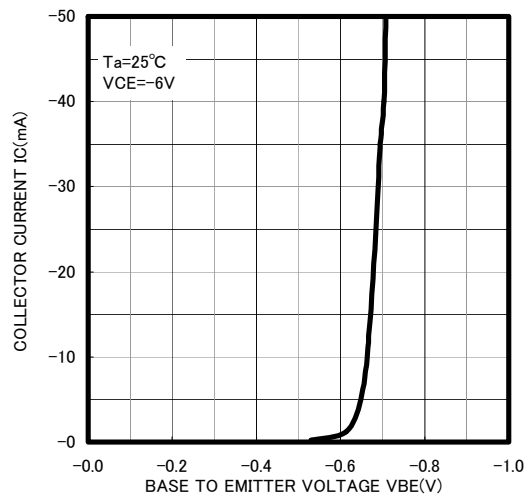
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TYPICAL CHARACTERISTICS (Tr2)

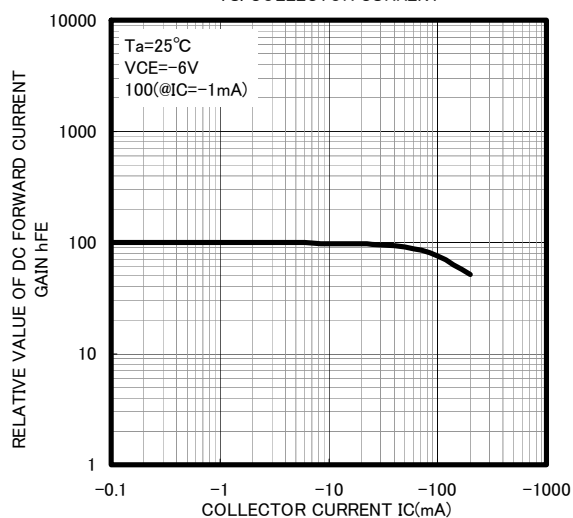
COMMON EMITTER OUTPUT



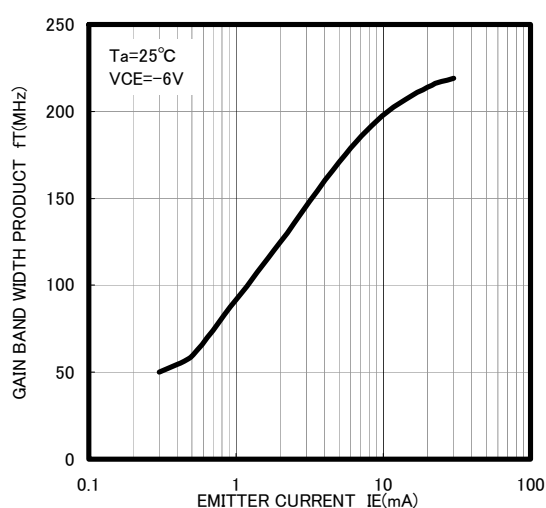
COMMON EMITTER TRANSFER



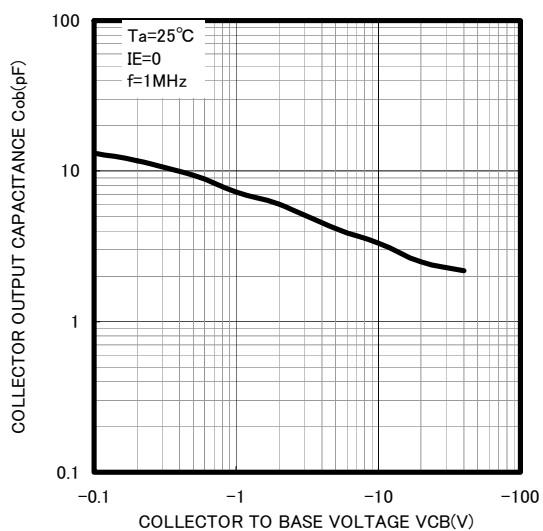
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE





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