# **RT2A00AM1**

### COMPOSITE TRANSISTOR FOR LOW FREQUENCY AMPLIFY APPLICATION SILICON PNP EPITAXIAL TYPE

#### DESCRIPTION

RT2A00AM1 is a composite transistor built with two ISA1235AC1 chips in SC-88A package.

#### FEATURE

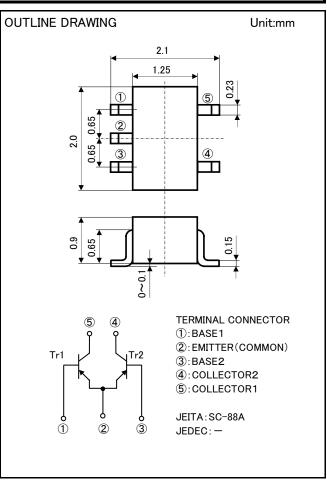
Silicon PNP epitaxial type

Each transistor elements are independent.

Mini package for easy mounting

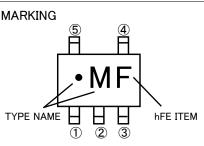
#### APPLICATION

For low frequency amplify application



#### MAXIMUM RATINGS (Ta=25°C) (Tr1,Tr2 COMMON)

Symbol	Parameter	Ratings	Unit	
V <sub>CBO</sub>	Collector to Base voltage	-60	V	
V <sub>EBO</sub>	Emitter to Base voltage	-6	V	
V <sub>CEO</sub>	Collector to Emitter voltage	-50	V	
Ι <sub>c</sub>	Collector current	-200	mA	
P <sub>T</sub>	Total dissipation	200	mW	
Tj	Junction temperature	+150	°C	
T <sub>stg</sub>	Storage temperature	-55~+150	°C	



### ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1,Tr2 COMMON)

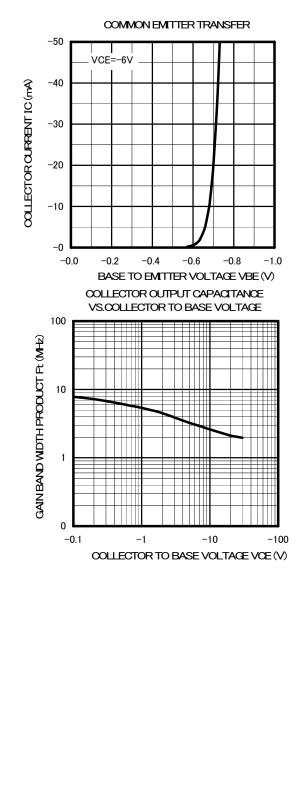
Symbol	Parameter	Toot or witten			Limits			
		Test conditions		Min	Тур	Max	Unit	
V <sub>(BR)CEO</sub>	Collector to Emitter breakdown voltage	$I_{c}=-100 \mu A, R_{BE}=\infty$		-50	-	-	V	
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =-60V, I <sub>E</sub> =0mA		-	-	-0.1	μA	
$\mathbf{I}_{EBO}$	Emitter cut off current	V <sub>EB</sub> =-6V, I c=0mA		-	-	-0.1	μA	
h <sub>FE</sub> *	DC forward current gain	Vce=-6V, Ic=-1mA		150	-	500	-	
h <sub>FE</sub>	DC forward current gain	Vce=-6V, Ic=-0.1mA		90	-	-	-	
$V_{\text{CE(sat)}}$	Collector to Emitter saturation voltage	Ic=-100mA, I <sub>B</sub> =-10mA		-	-	-0.3	V	
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =-6V, I <sub>E</sub> =10mA		-	200	-	MHz	
Cob	Collector output capacitance	V <sub>CB</sub> =-6V, I <sub>E</sub> =0mA, f=1MHz		-	4.0	-	pF	
NF	Noise figure	$V_{CE}$ =-6V, I <sub>E</sub> =0.3mA, f=100Hz, R <sub>G</sub> =10k $\Omega$		-	-	20	dB	
: It shows	: It shows h <sub>FE</sub> classification in right table.		ITE	M E			F	
			hFl		150~300	250 <i>-</i>	~500	

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### **TYPICAL CHARACTERISTICS** (Ta=25°C)(RTr1,RTr2 COMMON) DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT 1000 VCE=-6V ++++++ GAN HE 100 10 -0.1 -10 -100 -1000 -1 COLLECTOR CURRENTIC (mA) GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT 400 GAIN BAND WIDTH PRODUCT Ft (M+b) VCE=-6V 300 200 100 0 0.1 1 10 100 EMITTER CURRENT IE (mA) TOTAL DISSIPATION VS AMBIENT TEMPERATURE 300 (MM) L 200 TOTAL DISSIPATION 0 0 25 50 75 100 125 150

AMBIENT TEMPERATURE Ta (°C)



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