

## PRELIMINARY

Notice: This is not a final specification  
Some parametric are subject to change.

# RT3A77M

Composite Transistor  
For General Purpose High Current Drive Application  
Silicon PNP Epitaxial Type

## DESCRIPTION

RT3A77M is compound transistor built with two 2SA2166 chips in SC-88 package.

## FEATURE

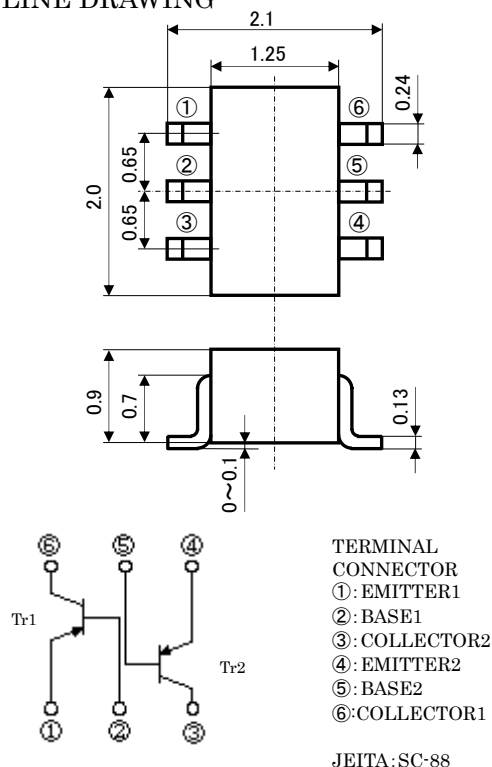
- High collector current
- Low collector to emitter saturation voltage
- Each transistor elements are independent
- Mini package for easy mounting

## APPLICATION

For switching application, small type motor drive application

## OUTLINE DRAWING

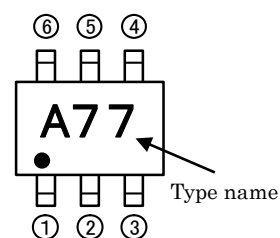
Unit: mm



## MAXIMUM RATING (Ta=25°C) (Tr1, Rr2)

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CEO</sub>	Collector to Emitter voltage	-60	V
V <sub>CBO</sub>	Collector to Base voltage	-60	V
V <sub>EBO</sub>	Emitter to Base voltage	-5	V
I <sub>C</sub>	Collector current	-500	mA
P <sub>T</sub>	Total dissipation	200	mW
T <sub>j</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55~+150	°C

## MARKING



## ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1, Rr2)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V <sub>(BR)CEO</sub>	Collector to Emitter breakdown voltage	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-60	—	—	V
V <sub>(BR)CBO</sub>	Collector to Base breakdown voltage	I <sub>C</sub> =-10μA, I <sub>E</sub> =0	-60	—	—	V
V <sub>(BR)EBO</sub>	Emitter to Base breakdown voltage	I <sub>E</sub> =-10μA, I <sub>C</sub> =0	-5	—	—	V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =-50V, I <sub>E</sub> =0	—	—	-0.1	μA
I <sub>EBO</sub>	Emitter cut off current	V <sub>EB</sub> =-3V, I <sub>C</sub> =0	—	—	-0.1	μA
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =-10V, I <sub>C</sub> =-150mA	100	—	300	—
V <sub>CE(sat)</sub>	Collector to Emitter saturation voltage	I <sub>C</sub> =-150mA, I <sub>B</sub> =-15mA	—	—	-0.4	V
V <sub>BE(sat)</sub>	Base to Emitter saturation voltage	I <sub>C</sub> =-150mA, I <sub>B</sub> =-15mA	—	—	-1.3	V
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =-20V, I <sub>E</sub> =50mA, f=100MHz	200	—	—	MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> =-10V, f=1MHz	—	—	8	pF



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**Keep safety first in your circuit designs!**

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