

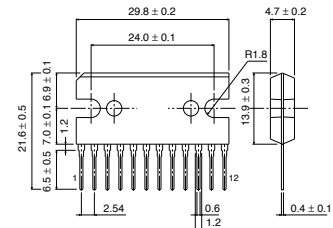
## System Regulator for Car Stereo

# BA4908

### ● Description

BA4908 is a system regulator IC for car stereo.  
This IC incorporates 1 channel of 5.6V output,  
2 channels of 8.7V output and 2 channels of  
high side switch.

### ● Dimension (Unit : mm)



**SIP-M12**

### ● Features

- 1) PNP output and low drop out type (Except AMP and ANT)
- 2) Built-in output current limit circuit to protect IC from destruction by short
- 3) Built-in over-voltage protection circuit to deliver strong design for surge input to BACK UP and Vcc
- 4) 12 pin power package perfect for space saving design
- 5) Built-in thermal protection circuit to protect IC from thermal destruction

### ● Applications

Car stereo

### ● Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	Vcc	24	V
Power dissipation	Pd	3000 *	mW
Operating temperature range	Topr	-30 ~ +85	°C
Storage temperature range	Tstg	-55 ~ +150	°C

\*Derating : 27.2mW/°C for operation above Ta=25°C

### ● Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Recommended supply voltage	Vcc	10	13.2	16	V
Operating voltage range	Vcc	6.3	13.2	24	V

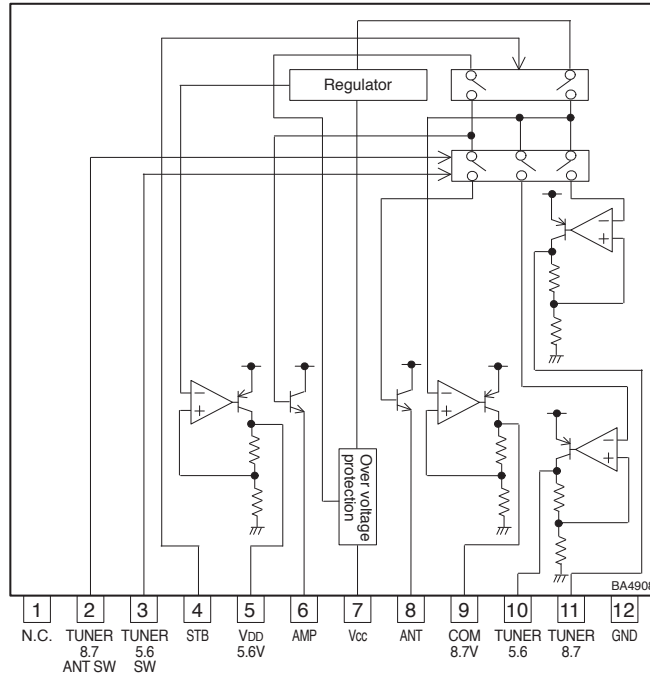
\*Electric characteristic is not guaranteed. (Especially at low input voltage)

● Electrical characteristics (Unless otherwise noted: Ta=25°C, Vcc=13.2V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current at standby	I <sub>ST</sub>	—	0.55	0.80	mA	STAN BY pin = 0V
Output voltage(VDD)1	V <sub>O1</sub>	5.30	5.60	5.90	V	I <sub>o1</sub> =80mA
Minimum I/O voltage difference	ΔV <sub>O13</sub>	—	0.3	0.7	V	I <sub>o1</sub> =80mA
Output current capacity	I <sub>o1</sub>	100	200	—	mA	V <sub>O1</sub> ≥5.3V
Output voltage(COM)2	V <sub>O2</sub>	8.25	8.70	9.15	V	I <sub>o2</sub> =120mA
Minimum I/O voltage difference	ΔV <sub>O23</sub>	—	0.4	0.7	V	I <sub>o2</sub> =120mA
Output current capacity	I <sub>o2</sub>	150	300	—	mA	V <sub>O2</sub> ≥8.25V
I/O voltage difference(AMP)3	ΔV <sub>O31</sub>	—	1.0	1.5	V	I <sub>o3</sub> =400mA
Output current capacity	I <sub>o3</sub>	500	900	—	mA	V <sub>O3</sub> ≥11.7V
I/O voltage difference(ANT)4	ΔV <sub>O41</sub>	—	1.0	1.5	V	I <sub>o4</sub> =400mA
Output current capacity	I <sub>o4</sub>	500	900	—	mA	V <sub>O4</sub> ≥11.7V
Output voltage(TUNER5.6)5	V <sub>O5</sub>	5.3	5.6	5.9	V	I <sub>o5</sub> =50mA
Minimum I/O voltage difference	ΔV <sub>O53</sub>	—	0.4	0.7	V	I <sub>o5</sub> =120mA
Output current capacity	I <sub>o5</sub>	150	300	—	mA	V <sub>O5</sub> ≥5.3V
Output voltage(TUNER8.7)6	V <sub>O6</sub>	8.25	8.70	9.15	V	I <sub>o6</sub> =140mA
Minimum I/O voltage difference	ΔV <sub>O63</sub>	—	0.4	0.7	V	I <sub>o6</sub> =200mA
Output current capacity	I <sub>o6</sub>	250	500	—	mA	V <sub>O6</sub> ≥8.25V

\* This product is not designed for protection against radioactive rays.  
 \* Output current capacity must be set below MINIMUM of the specification.

● Block Diagram



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