

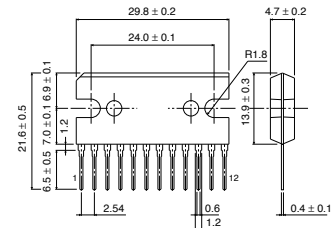
System Regulator for Car Stereo

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

