# Mid-Power Multichannel Series

## 4 x 100 Watt 4 Ohm Class D Audio Amplifier Board - T-AMP (AA-AB33182)



#### Key Features:

Output Power

100W@4Ohm 27V DC THD+N 10% 69W@4Ohm 27V DC THD+N 1%

- Active Indicator
- BTL Architecture
- Low Noise Cooling Fan
- Overcurrent Protection
- Overtemperature Protection
- Optimized Heatsink Design
- 4-screw Easy Installation
- Weight: 600g/1.32 lbs (±10%)
- Size: 6.00 x 4.50 x 1.30 inches Distributors:





All these boards are per-tested with our power supply solution to comply with FCC and CE. For all customers who need those information, please contact our distributor or Sure Electronics. RoHS compliant will need an MOQ of 1000pcs per order.

#### **Ready for:**

FCCCE RoHS Contact info

info@sure-electronics.com



## **Electrical Specifications**

Specifications typical @ +25°C, powered by 27V DC, unless otherwise noted. Specifications subject to change without notice.

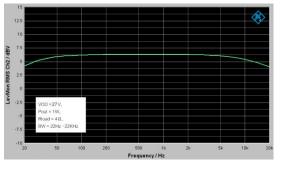
Parameter	Conditions	Min.	Тур.	Max.	Units
Power Supply	-	15	27	-	VDC
Idle Dower	SD Floating, FAN ON	-	10.6	20	W
Idle Power	SD Floating, FAN OFF	-	8.4	15	W
Standby Power	SD Connected to GND, FAN ON	-	2.7	6	W
Maximum Current	400W @ 40hm	-	16.1	-	А
Efficiency	100W @ 4Ohm	90	92	95	%
Minimum Load Impedance	-	-	4	-	Ω
Switching Frequency	SD Floating	-	760	-	KHz

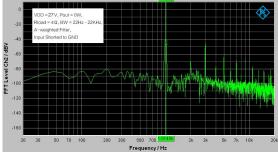
### Audio Performance

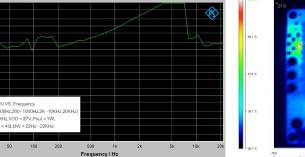
Specifications typical @ +25°C, powered by 27V DC, unless otherwise noted. Specifications subject to change without notice.

Parameter	Conditions	Min.	Тур.	Max.	Units
Gain	-	30	32	34	dB
Input Sensitivity(RMS)	@4Ω,100W,1KHz	-	520	-	mV
Input Impedance	-	-	10	-	KΩ
Output Dower	@4Ω THD+N 1%	-	69	-	W
Output Power	@4Ω THD+N 10%	-	100	-	W
Bandwidth @ $\pm 3$ dB	@4Ω	20	-	20K	Hz
THD	@4Ω, 1W, 1KHz	-	0.03	-	%
	@4Ω, 10W, 1KHz	-	0.09	-	%
Output Noise Level	A-weighting, Input Connected to GND	-	211	-	μV
SNR	69W @4Ω THD+N 1%	-	90	-	dB

## **Typical Performance Graphs**









All parameters were tested with Rohde & Schwarz UPV audio analyzer (AES17 filter enabled) and Audio Precision AUX0025 filter. For authorized distributors and OEM customers who need more detailed performance graphs and parameter settings, please send an inquiry e-mail to us. (Not available for retail customers)

#### **Model Selection Guide**

Model Number	Output Power	Power Supply Range	Typical Load	Amplifier IC	Dimensions
AA-AB35281	3 X 200Watt	DC 24-36V	3Ω	T-AMP	6"X4.5"
AA-AB33184	4 X 100Watt	DC 14V-36V	6Ω	TDA7498	6"X4.5"
AA-AB33182	4 X 100Watt	DC 15-27V	4Ω	T-AMP	6"X4.5"
AA-AB34181	6 X 100Watt	DC 14V-36V	6Ω	TDA7498	6"X4.5"

7. Suggested power supply solution:

Mean Well MW 27V 13A 350W AC/DC Switching Power Supply NES-350-27 (PS-SP11155)

If you have other power supply requirements, please feel free to contact us.

#### Notes:

1. The output power is rated at the condition THD+N 10%,1kHz sine wave.

2. All amplifier boards don't employ power supply reverse polarity protection. Stresses beyond the power supply range maximum ratings may cause permanent damage.

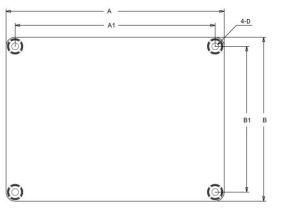
3. None typical load may cause rating power reduction.

4. Dimensions mean length and width of PCB only, excluding excessive part out of the PCB outline.

5. All parameters were tested with Rohde & Schwarz UPV audio analyzer (AES17 filter enabled) and AP AUX0025 filter. Linear Power Supply units were used for testing.

6. Sure Electronics promises all standard products life cycle more than 5 years. Sure Electronics reserves the right to update the version without notice. All the products sent to retail customers are the latest version. We will provide back-to-order service (100 Pieces MOQ needed) for our distributors in 5 years.

## **Mechanical Dimensions**

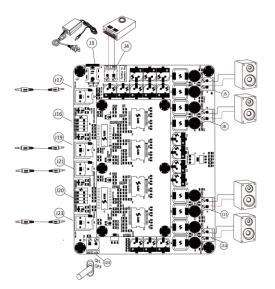


		A	A1	В	B1	D
Dime	nsions	(inch/mm)	(inch/mm)	(inch/mm)	(inch/mm)	(inch/mm)
		6.00/152.40	5.60/142.24	4.50/114.3	4.10/104.14	0.15/3.8

#### Notes:

 $\begin{array}{l} \cdot \mbox{ All dimensions are typical in inches/mm} \\ \cdot \mbox{ Tolerance } x.xx = \pm 0.02(\pm 0.50) \\ \mbox{ Height:} \\ \mbox{ AA-AB33184, AA-AB33182: 1.30inch/33.02mm} \\ \mbox{ AA-AB35281: 1.48inch/37.60mm} \\ \mbox{ AA-AB34181: 1.53inch/38.90mm} \end{array}$ 

Connections



#### Power Supply Connector: • J3 DC Jack 5.5mm/2.5mm

 J4 Terminal Block RJ128 (optional)

	nction
	GND
• \	/CC

#### Audio Input Connector:

J17, J19, J21, J23 RCA Jack
J16, J20 RJ141V (Optional)

	Pin	Function
J16		CH1
	•	GND
	•	GND
	•	CH2
J20		CH3
	•	GND
	•	GND
	•	CH4

#### Mute Control Connector:

J24 Terminal Block RJ128

Pin	Function
	MUTE
•	+5V

#### Speaker Output Connector: • J5, J8, J11, J14 Terminal Block RJ128

	Pin	Pin Function		
J5		OUT1+		
<b>J</b> 5	٠	OUT1-		
J8		OUT2+		
	•	OUT2-		

	Pin	Function
J11		OUT3+
311	•	OUT3-
J14		OUT4+
	•	OUT4-

## Sure Electronics

Make Your Audio Application Simple!

NO.9, Weidi Road, Xianlin University City, Qixia District, Nanjing, Jiangsu Province, P.R.C

## www.sure-electronics.com www.wondom.com

Mail: store@sure-electronics.com Skype: surewebstore