

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 24V DC THD+N 10%
89W@4Ohm 24V DC THD+N 1%
- Power and Clip Indicator
- BTL Architecture
- Temperature Control Fan (Optional)
- Full Protection
- Optimized Heatsink Design
- 4-screw Easy Installation
- Weight: 498g/1.10 lbs (±10%)
- Size: 6.00inch X 4.50inch X 1.30inch

Electrical Specifications

Specifications typical @ +25°C, Powered by 24V DC, unless otherwise noted. Specifications subject to change without notice.

Parameter	Conditions	Min.	Typ.	Max.	Units
Power Supply	-	12	24	36	VDC
Idle Power	SD Floating, FAN ON	-	14.8	20	W
	SD Floating, FAN OFF	-	11.5	15	W
Standby Power	SD Connected to GND, FAN ON	-	6.8	10	W
Maximum Current	100W @ 4Ohm	-	18.9	-	A
Efficiency	100W @ 4Ohm	82	-	88	%
Minimum Load Impedance	-	-	-	-	Ω
Switching Frequency	SD Floating	-	700	-	KHz
Fan Active @ Temperature	-	-	-	-	°C

Audio Performance

Specifications typical @ +25°C, Powered by 24V DC, unless otherwise noted. Specifications subject to change without notice.

Parameter	Conditions	Min.	Typ.	Max.	Units
Gain	-	30	32	34	dB
Input Sensitivity(RMS)	@4Ω, 100W, 1KHz	-	4.83	-	V
Input Impedance	-	-	10	-	KΩ
Output Power	@4Ω THD+N 1%	-	89	-	W
	@4Ω THD+N 10%	--	100	-	W
Bandwidth @ ±3dB	@4Ω	20	-	20K	Hz
THD	@4Ω, 1W, 1KHz	-	0.0273	-	%
	@4Ω, 10W, 1KHz	-	0.0743	-	%
Output Noise Level	A-weighting, Input Connected to GND	-	326.44	-	μV
SNR	89W @4Ω THD+N 1%	-	77.78	-	dB

Environmental Conditions:

- Humidity: 5-85% RH Non-condensing
- Operating Temperature Ambient: 0°C to +55°C
- Storage Temperature: -40°C to 85°C

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.

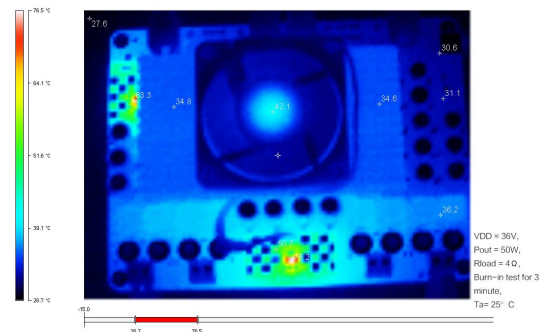
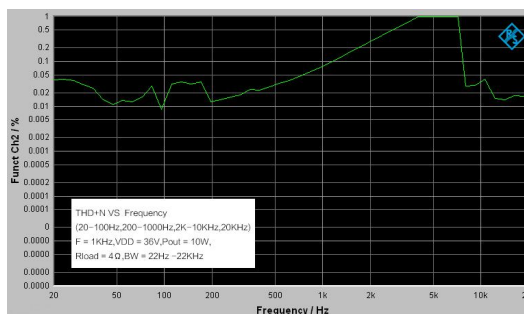
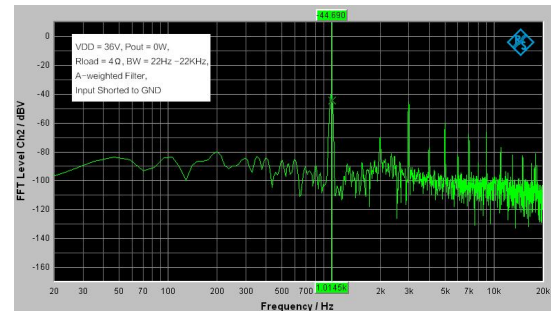
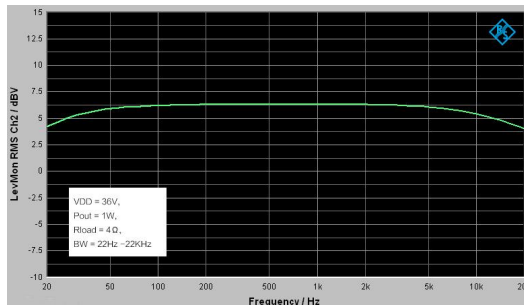
Ready for:



RoHS



Typical Performance Graphs

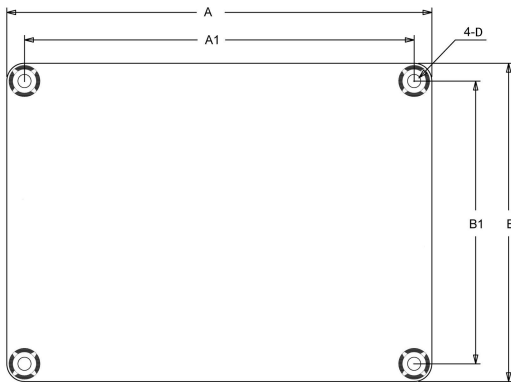


All parameters were tested with Rohde & Schwarz UPV audio analyzer (AES17 filter enabled) and AP AUX0025 filter. For authorized distributors and OEM customers who need more detailed performance graphs and parameter settings, please send an inquiry e-mail to us. (Not available for retail customers)

Model Selection Guide

Model Number	Output Power	Power Supply Range	Typical Load	Amplifier IC	Dimensions
AA-AB33312	2 X 200Watt +1 X 400Watt	DC 15-46V	3Ω	T-AMP	6"X4.5"#1
AA-AB33511	2 X 300Watt +1 X 500Watt	DC 15-52V	3Ω	T-AMP	6"X4.5"
AA-AB35281	3 X 200Watt	DC 15-36V	3Ω	T-AMP	6"X4.5"
AA-AB35191	3 X 300Watt	DC 15-42V	3Ω	T-AMP	6"X4.5"
AA-AB35311	3 X 400Watt	DC 15-46V	3Ω	T-AMP	6"X4.5"
AA-AB35511	3 X 500Watt	DC 15-52V	3Ω	T-AMP	6"X4.5"
AA-AB33184	4 X 100Watt	DC 14V-39V	6Ω	TDA7498	6"X4.5"
AA-AB34181	6 X 100Watt	DC 14V-39V	6Ω	TDA7498	6"X4.5"
AA-AB33182	4 X 100Watt	DC 15-36V	4Ω	T-AMP	6"X4.5"

Mechanical Dimensions



Dimensions	A (inch/mm)	A1 (inch/mm)	B (inch/mm)	B1 (inch/mm)	D (inch/mm)
#1	6.00/152.40	5.60/142.24	4.50/114.3	4.10/104.14	0.14/3.60

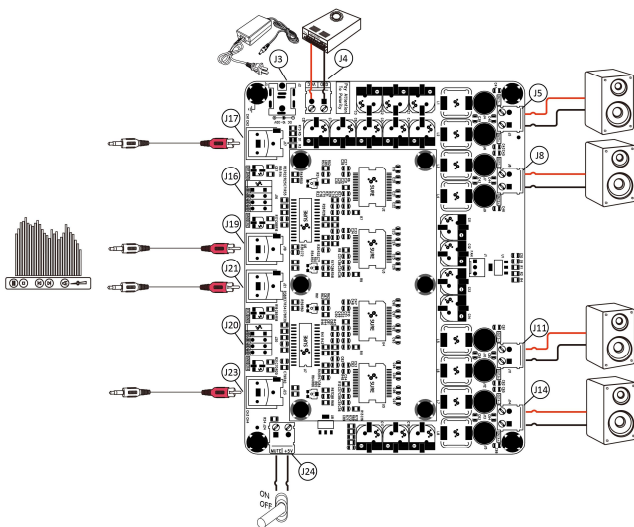
Notes:

- All dimensions are typical in inches/mm
- Tolerance x.xx = ±0.02(±0.50)

Height:

- AA-AB33184, AA-AB34181, AA-AB33182: 1.3inch(33.02mm)
- Others: 1.48inch(37.60mm)

Connections



Power Supply Connector:

- J3 DC Jack 5.5mm/2.5mm
- J4 Terminal Block RJ128 (optional)

Pin	Function
1	GND
2	VCC

Audio Input Connector:

- J17, J19, J21, J23 RCA Jack
- J16, J20 RJ141V

Pin	Function
1	CH
2	GND
3	GND
4	CH

Mute and Standby Control

Connection:

- J24

Speaker Output Connector:

- J15, J8, J11, J14 Terminal Block RJ128

Pin	Function
1	OUT1+
2	OUT1-

Notes:

- The output power is rated at the condition THD+N 10%, 1kHz sine wave.
- All amplifier boards don't employ power supply reverse polarity protection. Stresses beyond the power supply range maximum ratings may cause permanent damage.
- None typical load may cause rating power reduction.
- Dimensions mean length and width of PCB only, excluding excessive part out of the PCB outline.
- If any model within product series is out of stock, another model with compatible size and function, featuring more rating output power will be sent as the substitute without notice. For example, *1 AA-AB31312's alternative model is AA-AB33511. *2 AA-AB35281's alternative model is AA-AB35191.
- 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.
- Sure Electronics promise all standard products life cycle more than 5 years. Sure Electronics reserve 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.

8. Suggested power supply solution:

Mean Well MW 24V 18.8A 450W AC/DC Switching Power Supply SE-450-24 UL/CUL (PS-SP11185)

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