Low Power Stereo Series

2 x 25 Watt 6 Ohm Class D Audio Amplifier Board - TDA7492 (AA-AB32165)



Key Features:

- **Output Power**
  25W@6Ohm 16V DC THD+N 10%
  20W@6Ohm 16V DC THD+N 1%
- **Gain Adjustable**
- **Block Terminal and Banana (optional)**
- **Mute and Standby Control**
- **Overcurrent Protection**
- **Overtemperature Protection**
- **Optimized Heatsink Design**
- **4-screw Easy Installation**
- **Weight: 309g/ 0.68 lbs**
- **Size: 4.80 x 3.60 x 0.94 inches**

Distributors:

PARTS EXPRESS — YOUR ELECTRONICS CONNECTION

MCM

AXIOMEDIA

HOBBYHIFILaDEN

AUDIOPHONICS

Yokohama Bayside Net

All these boards are pre-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 1000 pieces per order.

Ready for:

FC CE

RoHS

Contact info

- **Email:**
  info@sure-electronics.com

WONDOM™

Electrical Specifications

Specifications typical @ +25℃, powered by 16V DC, unless otherwise noted. Specifications subject to change without notice.

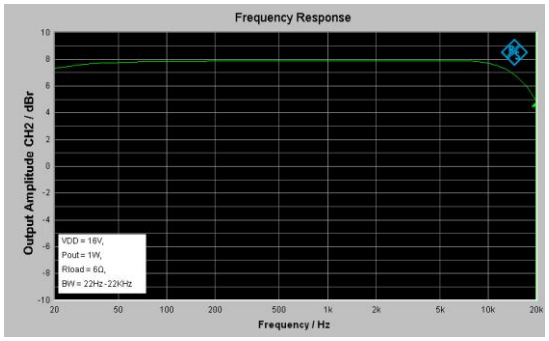
Parameter	Conditions	Min.	Typ.	Max.	Units
Power Supply	-	14	16	19	VDC
Idle Power	STBY Floating	-	0.56	0.61	W
Standby Power	STBY Connected to GND	-	0.096	0.1	W
Maximum Current	50W @ 6Ohm	-	3.5	-	A
Efficiency	2 X 25W @6Ω,powered by 16V DC	87	90	93	%
Minimum Load Impedance	-	-	4	-	Ω
Switching Frequency	No Load	300	350	400	KHz

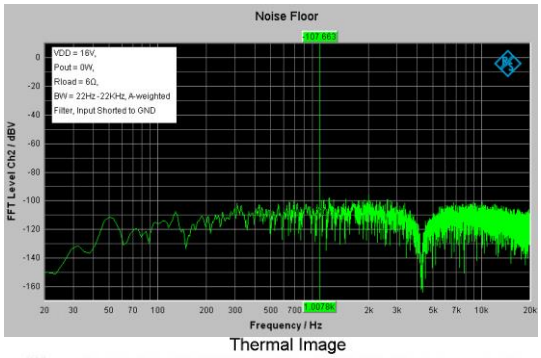
Audio Performance

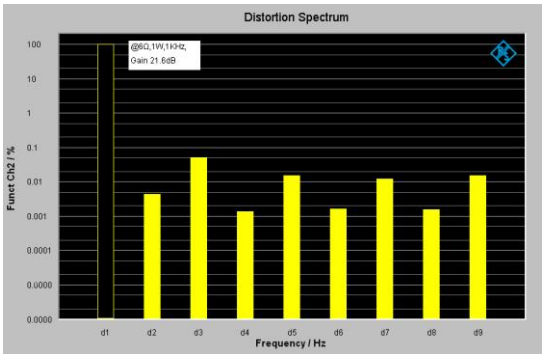
Specifications typical @ +25℃, powered by 16V DC, unless otherwise noted. Specifications subject to change without notice.

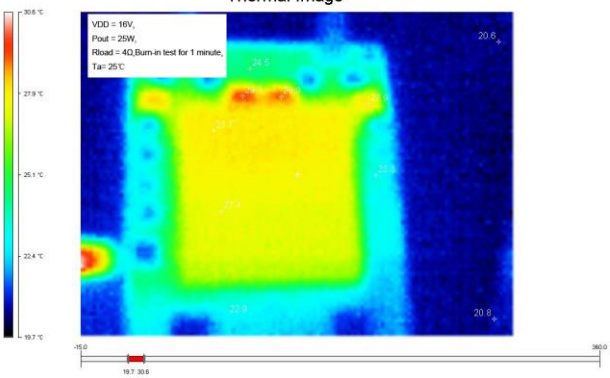
Parameter	Conditions	Min.	Typ.	Max.	Units
Gain	K1 ON, K2 ON	20.6	21.6	22.6	dB
	K1 ON, K2 OFF	26.6	27.6	28.6	dB
	K1 OFF, K2 ON	30.1	31.1	32.1	dB
	K1 OFF, K2 OFF	32.6	33.6	34.6	dB
Input Sensitivity	Gain 21.6dB	1.38	1.48	1.58	V
	Gain 27.6dB	0.66	0.73	0.80	V
	Gain 31.1dB	0.45	0.49	0.53	V
	Gain 33.6dB	0.32	0.37	0.42	V
Input Impedance	-	48	60	-	KΩ
Output Power	@6Ω THD+N 1%	-	20	-	W
	@6Ω THD+N 10%	-	25	-	W
Bandwidth @ -3dB	@6Ω, Gain21.6dB	20	-	20K	Hz
THD	@6Ω,1W,1KHz, Gain 21.6dB	-	0.05	-	%
Output Noise Level	A-weighting, Gain 21.6dB	170	180	190	uV
SNR	20W @6Ω, THD+N 1%, Gain 21.6dB	-	91	-	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	Dimension
AA-AB32131	2 X 2Watt	DC6-12V	4Ω	PAM8803	3"X2" #1
AA-AB32231	2 X 8Watt	DC8-19V	8Ω	TPA3110	3"X2"
AA-AB32992	2 x 15Watt	DC10-24V	8Ω	MAX9736A	3.6"X2.7"#2
AA-AB32996	2 X 15Watt	DC10-24V	8Ω	TPA3110	3.6"X2.7"
AA-AB32155	2 X 15Watt	DC10-14V	4Ω	TA2024	3.6"X2.7"
AA-AB32254	2 X 20Watt	DC10-28V	8Ω	MAX98400A	3.6"X2.7"
AA-AB32166	2 X 25Watt	DC10-26V	8Ω	TDA7492P	3.6"X2.7"
AA-AB32167	2 X 25Watt	DC10-30V	4Ω	TPA3123	3.6"X2.7"
AA-AB32165	2 X 25Watt	DC14-19V	6Ω	TDA7492	4.8"X3.6" #3

Notes:

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

2. All amplifier board employs reverse polarity protection excluding AA-AB32165, AA-AB32174. Stresses beyond the power supply range maximum ratings may cause permanent damage.

3. Not typical load may cause rating power reduction.

4. Dimension means length and width of PCB only, excluding excessive part out of the PCB outline.

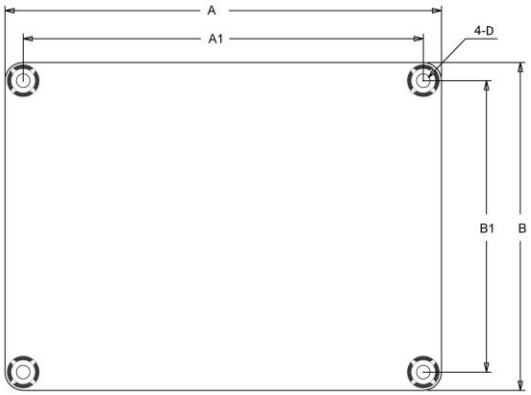
5. All parameters were tested with Rohde & Schwarz UPV audio analyzer and AP AUX0025 filter with AES17 filter enabled. Linear Power Supply units were used for testing.

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.

7. We also provide the power supply adaptors.
Mean Well RS-50-15 AC/DC Single Output Switching Power Supply 15V 3.4A 50W (PS-SP11537)

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

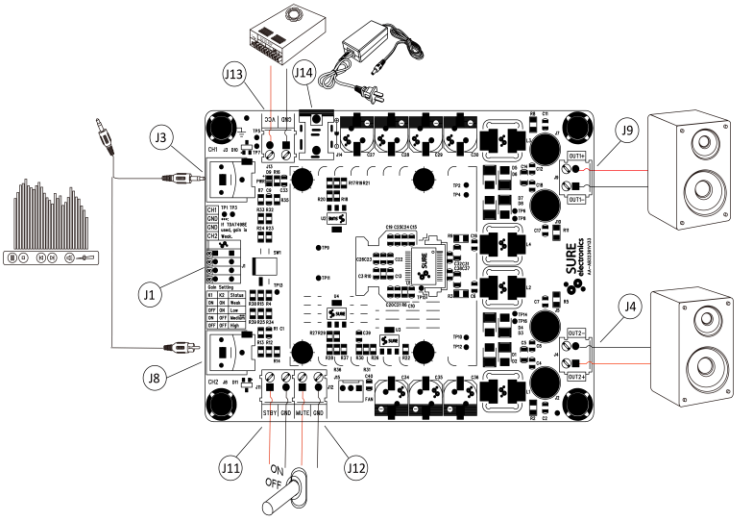
Mechanical Dimensions



Dimensions	A (inch/mm)	A1 (inch/mm)	B (inch/mm)	B1 (inch/mm)	D (inch/mm)
#1	3.0/76.2	2.7/68.58	2.0/50.8	1.7/43.18	0.12/3.1
#2	3.6/91.44	3.3/83.82	2.7/68.58	2.4/60.96	0.14/3.6
#3	4.80/121.92	4.40/111.76	3.60/91.44	3.20/81.28	0.15/3.8

Notes:
· All dimensions are typical in inches/mm
· Tolerance x.xx = ±0.02 (±0.50)
· Height:
1)AA-AB32178, AA-AB32179: 0.94inch/23.9mm
2)AA-AB32174:1.53inch/37.5mm
3)AA-AB32165:0.95inch/24.2mm
Other models 0.65inch/16.5mm

Connections



Power Supply Connector:
- J14 DC Jack 5.5mm/2.5mm
- J13 Terminal Block RJ128 (optional)

Pin	Function
■	GND
●	VCC

Control Connector:
- J11, J12 Terminal Block RJ128 (optional)

	Pin	Function
J11	■	STBY
	●	GND
J12	■	MUTE
	●	GND

Audio Input Connector:
- J3, J8 RCA Jack (CH1,CH2)
- J1 Terminal Block RJ141V (optional)

Pin	Function
■	CH1
●	GND
●	GND
●	CH2

Speaker Output Connector:
- J4, J9 Terminal Block RJ128

	Pin	Function
J9	■	OUT1-
	●	OUT1+
J4	■	OUT2+
	●	OUT2-

WONDOM™

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