High Power Mono Series

1 x 1000 Watt 2 Ohm Class D Audio Amplifier Board -LV

(AA-AB31395)

Key Features:

- Output Power
  1000W@ 2Ohm 60V DC THD+N 10%
- Wide Power Supply Range from DC48V - 72V
- Signal Level Sensor System
- Flexible Input Sensitivity
- Flexible Load Characteristic
- Power and Clip Indicator
- Weight: 840g/1.85 lbs (±10%)
- Size: 6 x 4.5 Inches PCB Size

Distributors:

PARTS EXPRESS
MCM
AXIOMEDIA
HOBBYHIFILADEN
AUDIOPHONICS
Yokohama Bayside Net

All these boards are pre-tested with our power supply solution to comply with RoHS. Any Requirement of FCC and CE, please contact us. 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:

RoHS

Contact info

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

WONDOM™

Electrical Specifications

Specifications typical @ +25℃, Powered by 60V DC, unless otherwise noted. Specifications subject to change without notice.

Parameter		Conditions		Min.	Typ.	Max.	Units
Number of Channels		-		-	1	-	-
Minimum Load Impedance		-		-	1.5	-	Ω
Efficiency		100W@2Ohm		-	90	-	%
Nominal Power Requirement		@60V, 2Ohm		-	1200	-	W
Operating Voltage		-		48	60	72	V
Idle Power		Signal detected (Load 2 Ohm)	FAN ON	-	25	-	W
			FAN OFF	-	24.3	-	
		No Signal detected		-	3.5	-	W
Switching Frequency		SD Floating@84V		-	600	-	kHz
Power Consumption		1/4 of max output power@2Ohm,100V		-	300	-	W
		1/8 of max output power@2Ohm, 100V		-	150	-	W
Control	Standby (Low = inputs enabled)	High-level Input Voltage		3.3	-	5.5	V
		Low-level Input Voltage		-	-	0.4	V
Standby Power		SD short to GND, only when low power module available		-	3.5	-	W
Under Voltage Protection		-		-	41	-	V

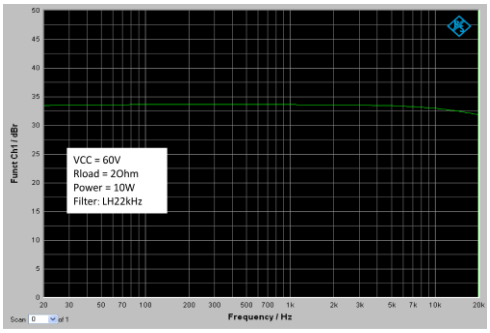
Audio Performance

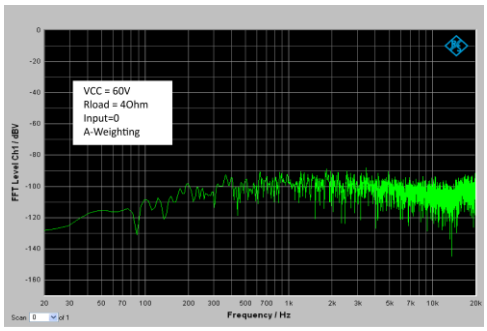
Specifications typical @ +25℃, Powered by 60V DC, unless otherwise noted. Specifications subject to change without notice.

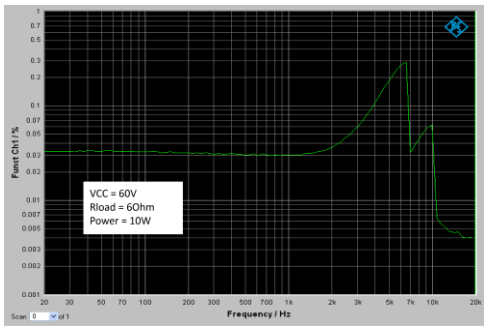
Parameter	Conditions	Min.	Typ.	Max.	Units
Input Sensitivity	1000W@2Ohm, 1kHz	-	1.3	-	Vrms
SNR	400W@2Ohm, A-weighting	-	100	-	dB
THD+N	10W@4Ohm, 1kHz	-	0.04	-	%
	100W@4Ohm, 1kHz	-	0.08	-	%
Input Impedance	-	-	10	-	kΩ
Output Noise Level	A-weighting, Input Connected to GND	-	450	-	uV
DC Offset	-	-	50	-	mV
Bandwidth	-	20	-	20k	Hz
Gain	@2Ohm, 1kHz	-	30	-	dB

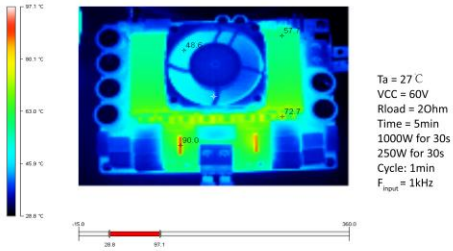
All parameters were tested with Rohde & Schwarz UPV audio analyzer (AES17 filter enabled) and Audio Precision AUX0025 filter. For authorized distributors and OEM customers who need more detailed performance graphs and parameter settings, please send an inquiry e-mail to us. (Not available for retail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

Typical Performance Graphs



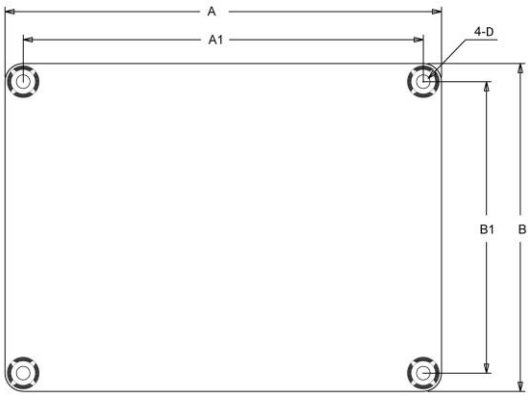






Test	Temperature		Duration/ Operation
Burn In Test	25℃	25℃	48hours
Low Temperature, Operating	0℃	0℃	Checking startup performance
High Temperature, Operating	55℃	55℃	2hours
Change of Temperature, Operating	0℃	50℃	On customers' requirement
The tests above are carried out under regular conditions. Please contact us directly if you require test reports under extreme conditions, especially for industrial and military purpose.			

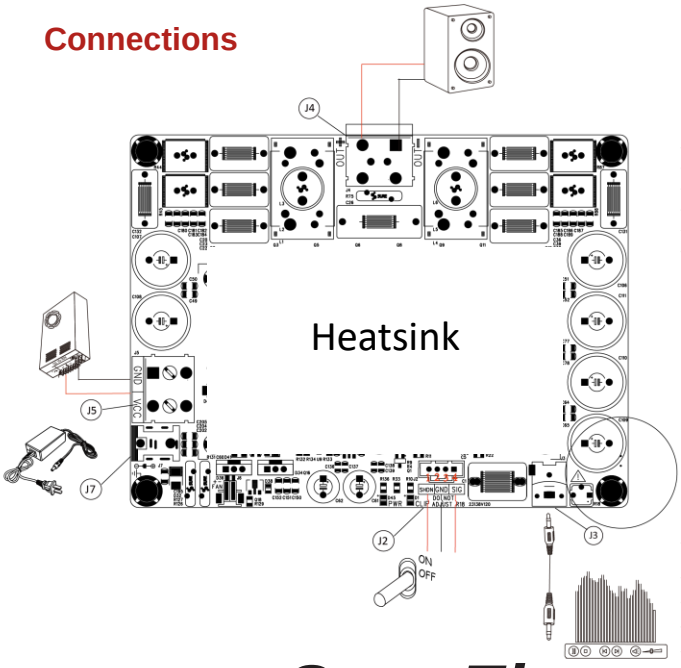
Mechanical Dimensions



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

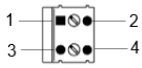
Notes:
· All dimensions are typical in inches/mm
· Tolerance x.xx = ±0.02(±0.50)

Connections



Switching Power Supply Connector:
· J5

Pin	Function
1	GND
2	
3	VCC
4	



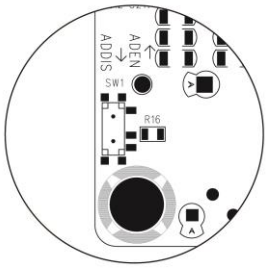
Power Adapter Connector:
· J7 DC Jack ID 2.5mm x OD 5.5 mm

Audio Input Connector:
· J3 RCA Jack

Audio Output Connector:
· J4 Molex-4Pin-3mm

Control Connector:
· J2

Pin	Function
1	SHDN
2, 3	GND
4	SIG



SW1 on the backboard can be used to turn off the Signal Detection Function. When the switch is turned to ADDIS, the signal detection function will be turned off. Take the silkscreen on board for reference.