

1 X 500Watt Class D Audio Amplifier Board - IRS2092

Overview :

This audio amplifier board employs IR's High Voltage, high performance class D audio amplifier driver IRS2092SPBF and 200V Single N-Channel HEXFET Power MOSFET IRFB4227.

This amplifier board supports mono amplification by using one channel half bridge topology.

By means of dedicated heatsink design with temperature controlled fan , it is capable of delivering

maximum power 500W RMS @ 4ohm without extraordinary heatsink.

Besides of built-in chip protection, ESD and spike protection components used throughout input and output of the amplifier board ensure its robustness and reliability.

Features:

2mm PCB thickness , 2Oz Cu

Screwing to chassis conveniently

Shut down easily by external pulled down to GND

Size : 6.3inchX4.5inchX2.9inch

Weight: 580g

Thermal and short circuit protection

undervoltage and overvoltage protection

Startup and power down pop elimination

Analog single ended signal input(RCA)

Output 500W@4ohm $\pm 60V$ DC THD+N 10%

400W@4ohm $\pm 60V$ DC THD+N 1%

Applications:

Public address

Car Audio

Specification:

Parameter	Condition	Min	Typ	Max	
Supply Voltage (V)	-	± 55	± 60	± 65	
Quiescent Current(mA)	Standby	-	<1	-	
	Powered by +60V DC				

	Standby Powered by -60V DC	-	8.5	-
	EN Floating Powered by +60V DC	-	8	-
	EN Floating Powered by -60V DC	-	32.6	-
Input Sensitivity (VRMS)	Powered by $\pm 60V$ DC	-	1.44	-
Input impedance	-	-	3.3K	-
Under Voltage Protect(V)	-	-	± 50	-
Over Voltage Protect(V)	-	-	± 72	-
Over Temperature Protect($^{\circ}C$)	-	-	100	-
Fan activated @ temperature($^{\circ}C$)	-	-	55	-
Gain (dB)	-	-	31	-
Output Power(W)	4ohm $\pm 60V$ DC THD+N 10%	-	500	-
	4ohm $\pm 60V$ DC THD+N 1%	-	405	-
Efficiency	1X500W @4ohm powered by $\pm 60V$ DC	-	92%	-
Minimum Load(ohm)	-	-	3	-
Frequency Response	+/-3dB	20Hz		20KHz
Operating Temperature Degrees Celsius	-	0	25	50

Package content:

1 X 500Watt Class D Audio Amplifier Board x1