

Parts List 100-200 Watt Linear and Class-C Amplifier

MOSFET Input

A-=Tayda <https://www.taydaelectronics.com>

1	IRFP250 MOSFET final	A-091
1	.0033uf WIMA 100V	A-1546
4	1uf WIMA 100V	A-4164
1	1500pf 100V	A-699
4	.1uf WIMA 100V	A-1569
1	.001uf 100V	A-4111
1	1N5819 Shockley diode	A-484
1	LM7812	A-207
1	L7815	A-181
1	L78L05	A-176
1	IRF9540 P-ch switch	A-083
1	SUP70101 P-ch switch, is a new much better DC switch, when used for high current switching.	Mouser 78-SUP70101EL-GE3
1	10K ohm NTC Thermistor	A-409
1	200 ohm 25 turn bias pot R3	A-590
1	470uf 50 vdc	A-4545
1	1K OHM 3W feedback resistor	A-2552 or two 2.2K 2W in parallel. A-2541, NOTE

Use non inductive, **no wire wound** resistors. I found the 5-watt metal film work good and easy to find. (Amazon, EBay)

3	10 ohm carbon resistors	A-2250
5	T106-2 Toroid	http://www.kitsandparts.com

MOSFET output

3	6.8 nf WIMA 400Vac	Mouser 505-FKP16800/1000/5
1	.015 uf WIMA 400Vac	Mouser 505-FKP4.015/1000/5
2	2200 pf Mica 500Vac	Mouser 598-CD19FD222JO3F
2	1 uf WIMA 250Vac	Mouser 505-M101/400/20

Tuning Cap

1	3600pf Silvered Mica 500v	Mouser 598-CD19FD362JO3F
---	---------------------------	---------------------------------

Option 2, I use a combination of the following two capacitors' A+B.

A	3300pf WIMA.	Mouser 505-FKP43300/1000/5
---	--------------	-----------------------------------

B	330pF Silvered Mica.	Mouser 598-CDV16FF331JO3F
---	----------------------	----------------------------------

Any combination that give you a total of 3600-3700pf is good. I ran across a bag of 390pf 1kv on Ebay and grabbed them up, so that is what I'm using with the 3300 WIMA.

Class A driver

1	Diecast Box style 1590A	A-5163
1	100 ohms, 25T Pot	A-584
2	100 ohm resistors	A-2051
1	470uf 16v	A-4521
1	100 ohm, 25T Pot	A-584
1	10K ohm, 25T Pot	A-586
1	TIP120 ST only	Mouser 511-TIP120
1	FT50-43 or FT50-3 Toroid	http://www.kitsandparts.com

Miscellaneous parts

100uf 50v	A-2588
10uf 50v	A-4150
.33uf 100v	A-4167

Most of the parts are inexpensive so order more than you think you will need. Anything can and will happen while building and testing.

I recommend three IRFP250 MOSFET finals; one for building, one for (why did I do that), and one for spare.

The list is not complete with all the components, but anything you need not on the list, should be available on the Tayda site or Mouser.

The capacitors on the MOSFET input are not critical, (WIMA not necessary) but use good quality. On the output use WIMA pulse capacitors.

The 2200pf silver mica across L3 needs to be 2200pf. Up to 2250pf is ok, so mix and match to get the correct value if a single 2200pf is not available.

<https://www.taydaelectronics.com>

<https://www.mouser.com/>

<https://www.kitsandparts.com>

1-21-2021