

Position				Suggested Best Part			Mouser		Digikey		Parts Connexion		Notes
Part	Value	Rating	Package	Q.ty	Manufacturer	Part	Order #	Notes	Order #	Notes	Order #		
Amplifier													
C1, C2	220uf	50V	E7,5-16	2	Elna	RJH	667-EEU-FM1H221	Panasonic FM	P12397-ND			Can be ordered from Elfa-Distirelec	
C4	100nf	250V	C10B5	1	Wima	MKP4	505-MKP4.1/250/10P						
C7	10nf	50V	C5B6.5	1	Wima	FKP2	505-FKP20.01/100/2.5					NOS ERO KP1834 is a (much) better alternative	
C9	220uF	50V	E7,5-16	1	Black Gate	FK	647-UFG1H221MHM	Nichicon FG				Black Gate PK or STD are fine alternatives	
C10	22pf		C5B3.5	1	CDE	CD10	598-CD10ED22JO3F		338-2640-ND				
C10 (Alternate comp.)	33pF		C5B3.5	1	CDE	CD10	598-CD10ED33JO3F		338-2922-ND				
C12	220pf	100V 2.5%	C5B4.5	1	Amtrans	AMCH	505-FKP2220/100/2.5	Wima FKP2			AMTRANS-73778		
C13	1uF	250V	Axial	1	Audyn	True Copper	75-V735P105X9200L	Vishay V-735P				Russian NOS K71-4 is an incredibly good cheaper alternative	
C30	1nf	100V	C5B4.5	1	Amtrans	AMCH	505-FKP21000/100/2.5	Wima FKP2			AMTRANS-73784	NOS ERO KC1850 is a fine alternative	
C32	150pf	100V 2.5%	C5B4.5	1	Amtrans	AMCH	505-FKP2150/100/2.5	Wima FKP2			AMTRANS-73852	NOS ERO KP1834 is a fantastic alternative to AMCH	
C34	10pf		C0805	1	CDE	MC	5982-08-100V10-F		338-1099-ND				
C34 (Alternate comp.)	27pf		C0805	1	CDE	MC	5982-08-100V27-F		338-1103-ND				
D1, D2	BAV99W		SOT23	2	NXP	BAV-99W	771-BAV99W-T/R		568-1625-1-ND				
D3	27V	1/2W	SOD80C	1	NXP	BZV55	771-BZV55-C27115		568-6260-1-ND				
IC1	LM318D		SO8	1	NatSemi	LM318M	926-LM318M/NOPB		LM318M-ND				
IC2	LM3886TF		TO220-11	1	NatSemi	LM3886TF	926-LM3886TF/NOPB		LM3886TF-ND				
R2	10K	1/4W 2%	R1206	1	Vishay	CMA0204	594-CMA02040X1002GB3		CMA-10KCT-ND				
R3	0R47	5W	TO220	1	Caddock	MP-930	684-MP930-0.5		MP930-0.50F-ND				
R3 (Cheaper alternative)	0R47	5W	TO220	1	Caddock	MP-915	684-MP915-0.5						
R3 Heatsink			TO220	1	Aavid Thermalloy		532-577202B00		HS107-ND				
R5, R8	22K	1/4W 0.1%	R1206	2	Susumu	RG32	754-RG3216P-2202-BT5		RG32P22.0KBCT-ND				
R6, R9	47K	1/4W 0.1%	R1206	2	Susumu	RG32	754-RG3216P-4702-BT5		RG32P47.0KBCT-ND				
R7	12K	1/2W 1%	R1206	1	Susumu	RG32	754-RG3216P-1202-BT5		RG32P12.0KBCT-ND				
R10	390	1/2W 1%	0309/12	1	Riken	RMG	660-CF1/2C391J	KOA CF1/2			RIKEN-62074		
R11	1	1/4W 2%	0410/15	1	KOA Speer	SPR2	660-SPRX2C1R0J						
R12, R37	3K3	1/2W 1%	R1206	2	Susumu	RG32	754-RG2012P-332DT5	RG20 (0805)	RG20P3.3KBCT-ND	RG20 (0805)		R12 is even better if Texas Components ASMP	
R13	100K	1/2W 1%	B	1	Caddock	MK312V	684-MK132V-100K						
R39	470K	1/4W 2%	R0805	1	Susumu	RG20	754-RG2012P-474-BT5		RG20P470KBCT-ND				
R43	22K	1/4W 2%	R0805	1	Susumu	RG20	754-RG2012P-223DT5		RG20P22KBCT-ND				
Power Supply													
C101, C201	10,000uf	50V	EB35D	2	Mundorf	M-Lythic AG (MPLI)	667-ECO-S1HA103DA	Panasonic TS-HA	P6690-ND		MUNDORF-74876		
C102, C202 (Optional)	100uF	35V	E5-10,5	2	Elna	Cerafine	647-UFG1H101MPM	Nichicon FG			ELNA-72680		
D105, D205	14V	1/2W	DO35	2	Fairchild	1N5244B	512-1N5244B		1N5244B-ND				
D101-D104, D201-D204	MUR820		TO220ACS	8	OnSemi	MUR820G	863-MUR820G		MUR820GOS-ND				
IC101, IC201	LM317		TO220ACS	2	OnSemi	LM317TG	863-LM317TG		LM317TGOS-ND				
R101, R201	50	1/2W 1%	TO126	2	Caddock	MP915	684-MP915-50		MP915-50.0F-ND				
R104, R204	200	1/2W 1%	B	2	Caddock	MK132V	684-MK132V-200						
T101	BC639-16	1W	TO-92	1	OnSemi	BC639-16	863-BC639-16ZL1G						
T201	BC640-16	1W	TO-92	1	OnSemi	BC640-16	863-BC640-016G						
DC & Speaker Protection													
C14	220uf	50V	E5-10.5	1	Nichicon	FW	647-UFW1V221MPD						
C15	22uf	25V	E2,5-5	1	Nichicon	FG	647-UFG1E220MDM						
C16	100uf	25V	E3,5-8	1	Nichicon	FG	647-UFG1E101MPM						
D4	1N4001		D-7.5	1	Any	1N4001	625-1N4001-E3/54		1N4001-E3/54GITR-ND				
DR1, DR2	SBYV27	100V	D-10	2	Vishay	SBYV27-100	625-SBYV27-100-E3/4						
LED	3mm		3mm	1	Any	Any	78-TLDR4400						
R14	470	2W	0309/12	1	Any		MOS1CT52R471J						
R15, R16	75K	1/4W	0207/10	2	Any		660-MF1/4CC7502F						
R19	10K	1/4W	0207/10	1	Any		660-MF1/4CC1002F						
R20	47K	1/4W	0207/10	1	Any		660-MF1/4CC4702F						
R21	220K	1/4W	0207/10	1	Any		660-MF1/4CC2213F						
R22	8K2	1/4W	0207/10	1	Any		660-MF1/4CC8251F						
R23	6K8	1W	0309/12	1	Any		MF1/2DC6811F						
K1	G5LE	DC24V		1	Omron	G5LE-14-DC24	653-G5LE-14-DC24		Z1013-ND				
Q1	BC639		TO-92	1	Any		863-BC639G						
Q2, Q3	BC546A		TO-92	2	Any		512-BC546CTA						
Connectors & Hardware													
AC1, AC2, NAC1, NAC2,OUT, OUT_GND, PWR_GND			PCB Faston	7	Keystone / Tyco	1287	534-1287		1287K-ND				
IN (Pin steap header)	Gold plated			1	Molex	22-11-2022	538-22-11-2022		WM2700-ND				
EXT_LED (Pin steap header)	Tinned			1	Molex	22-23-2021	538-22-23-2021		WM4200-ND				
Molex crimp pin	Gold plated			6	Molex	08-65-0816	538-08-65-0816		WM2140CT-ND				
Molex crimp housing				2	Molex	10-11-2023	538-10-11-2023		WM2601-ND				
Spacer	M3			4	Harwin	R30-1011002	855-R30-1011002		952-1485-ND				
Screw	M3			8	Keystone	29311	534-29311		29311K-ND				

This BOM is for one (1) PCB.