
NICOM

Part List Schematic : FMSE02

Rif.	Value	Remarks	Description	Code
C1	1000MF	35V	Aluminium Electrolytic Capacitor	
C2	47MF	35V	Aluminium Electrolytic Capacitor	
C3	0.1MF		SMD Multilayer Ceramic Capacitor	
C4	0.1MF		SMD Multilayer Ceramic Capacitor	
C5	1000MF	16V	Aluminium Electrolytic Capacitor	
C6	0.1MF		SMD Multilayer Ceramic Capacitor	
C7	47MF	35V	Aluminium Electrolytic Capacitor	
C8	47MF	35V	Aluminium Electrolytic Capacitor	
C9	10nF		SMD Multilayer Ceramic Capacitor	
C10	47MF	35V	Aluminium Electrolytic Capacitor	
C11	47MF	35V	Aluminium Electrolytic Capacitor	
C12	47MF	35V	Aluminium Electrolytic Capacitor	
C13	0.1MF		SMD Multilayer Ceramic Capacitor	
C14	220MF	35V	Aluminium Electrolytic Capacitor	
C15	220MF	35V	Aluminium Electrolytic Capacitor	
C16	0.1MF		SMD Multilayer Ceramic Capacitor	
C17	100MF	25V	Aluminium Electrolytic Capacitor	
C18	47MF	16V	SMD Aluminium Electrolytic Capacitor	
C19	220MF	35V	Aluminium Electrolytic Capacitor	
C20	0.1MF		SMD Multilayer Ceramic Capacitor	
C21	220MF	35V	Aluminium Electrolytic Capacitor	
C22	100MF	25V	Aluminium Electrolytic Capacitor	
C23	4.7nF		SMD Multilayer Ceramic Capacitor	
C24	6.8nF		SMD Multilayer Ceramic Capacitor	
C25	10pF		SMD Multilayer Ceramic Capacitor	
C26	220nF		SMD Multilayer Ceramic Capacitor	
C27	0.1MF		SMD Multilayer Ceramic Capacitor	
C28	47MF	16V	SMD Multilayer Ceramic Capacitor	
C29	NC		SMD Multilayer Ceramic Capacitor	
C30	10MF	35V	SMD Multilayer Ceramic Capacitor	
C31	0.1MF		SMD Multilayer Ceramic Capacitor	
C32	0.1MF		SMD Multilayer Ceramic Capacitor	
C33	0.1MF		SMD Multilayer Ceramic Capacitor	
C34	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C35	100MF	25V	Aluminium Electrolytic Capacitor	
C36	0.1MF		SMD Multilayer Ceramic Capacitor	
C37	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C38	0.1MF		SMD Multilayer Ceramic Capacitor	
C39	0.1MF		SMD Multilayer Ceramic Capacitor	
C40	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C41	0.1MF		SMD Multilayer Ceramic Capacitor	
C42	0.1MF		SMD Multilayer Ceramic Capacitor	
C43	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C44	0.1MF		SMD Multilayer Ceramic Capacitor	
C45	0.1MF		SMD Multilayer Ceramic Capacitor	
C46	4.7nF		SMD Multilayer Ceramic Capacitor	
C47	220nF		SMD Multilayer Ceramic Capacitor	
C48	220nF		SMD Multilayer Ceramic Capacitor	
C49	4.7nF		SMD Multilayer Ceramic Capacitor	

NICOM

Rif.	Value	Remarks	Description	Code
C50	47MF	16V	SMD Aluminium Electrolytic Capacitor	
C51	1nF		SMD Multilayer Ceramic Capacitor	
C52	220nF		SMD Multilayer Ceramic Capacitor	
C53	10pF		SMD Multilayer Ceramic Capacitor	
C54	10pF		SMD Multilayer Ceramic Capacitor	
C55	0.1MF		SMD Multilayer Ceramic Capacitor	
C56	47MF	16V	SMD Aluminium Electrolytic Capacitor	
C57	4.7MF	25V	SMD Aluminium Electrolytic Capacitor	
C58	0.1MF		SMD Multilayer Ceramic Capacitor	
C59	1nF		SMD Multilayer Ceramic Capacitor	
C60	1nF		SMD Multilayer Ceramic Capacitor	
C61	NC		SMD Multilayer Ceramic Capacitor	
C62	60pF		Trimmer Polyethylene Film Capacitor	
C63	220pF		SMD Multilayer Ceramic Capacitor	
C64	100MF	25V	Aluminium Electrolytic Capacitor	
C65	0.1MF		SMD Multilayer Ceramic Capacitor	
C66	0.1MF		SMD Multilayer Ceramic Capacitor	
C67	22pF		SMD Multilayer Ceramic Capacitor	
C68	220pF		SMD Multilayer Ceramic Capacitor	
C69	47MF	16V	SMD Aluminium Electrolytic Capacitor	
C70	0.1MF		SMD Multilayer Ceramic Capacitor	
C71	0.1MF		SMD Multilayer Ceramic Capacitor	
C72	1000MF	16V	Aluminium Electrolytic Capacitor	
C73	0.1MF		SMD Multilayer Ceramic Capacitor	
C74	2.2MF	50V	SMD Multilayer Ceramic Capacitor	
C75	1000MF	16V	Aluminium Electrolytic Capacitor	
C76	0.1MF		SMD Multilayer Ceramic Capacitor	
C77	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C78	0.1MF		SMD Multilayer Ceramic Capacitor	
C79	0.1MF		SMD Multilayer Ceramic Capacitor	
C80	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C81	0.1MF		SMD Multilayer Ceramic Capacitor	
C82	100pF		SMD Multilayer Ceramic Capacitor	
C83	3.3pF		SMD Multilayer Ceramic Capacitor	
C84	100pF		SMD Multilayer Ceramic Capacitor	
C85	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C86	3.3pF		SMD Multilayer Ceramic Capacitor	
C87	100pF		SMD Multilayer Ceramic Capacitor	
C88	40pF		SMD Trimmer Polyethylene Film Capacitor	
C89	22pF		SMD Multilayer Ceramic Capacitor	
C90	0.1MF		SMD Multilayer Ceramic Capacitor	
C91	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C92	0.1MF		SMD Multilayer Ceramic Capacitor	
C93	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C94	1nF		SMD Multilayer Ceramic Capacitor	
C95	0.1MF		SMD Multilayer Ceramic Capacitor	
C96	4.7nF		SMD Multilayer Ceramic Capacitor	
C97	33pF		SMD Multilayer Ceramic Capacitor	
C98	22pF		SMD Multilayer Ceramic Capacitor	
C99	10pF		SMD Multilayer Ceramic Capacitor	
C100	1nF		SMD Multilayer Ceramic Capacitor	
C101	220pF		SMD Multilayer Ceramic Capacitor	

NICOM

Rif.	Value	Remarks	Description	Code
C102	0.1MF		SMD Multilayer Ceramic Capacitor	
C103	39pF		SMD Multilayer Ceramic Capacitor	
C104	22pF		SMD Multilayer Ceramic Capacitor	
C105	47pF		SMD Multilayer Ceramic Capacitor	
C106	0.1MF		SMD Multilayer Ceramic Capacitor	
C107	0.1MF		SMD Multilayer Ceramic Capacitor	
C108	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C109	0.1MF		SMD Multilayer Ceramic Capacitor	
C110	0.1MF		SMD Multilayer Ceramic Capacitor	
C111	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C112	0.1MF		SMD Multilayer Ceramic Capacitor	
C113	0.1MF		SMD Multilayer Ceramic Capacitor	
C114	4.7MF	25V	SMD Aluminium Electrolytic Capacitor	
C115	220MF	35V	Aluminium Electrolytic Capacitor	
C116	0.1MF		SMD Multilayer Ceramic Capacitor	
C117	0.1MF		SMD Multilayer Ceramic Capacitor	
C118	0.1MF		SMD Multilayer Ceramic Capacitor	
C119	0.1MF		SMD Multilayer Ceramic Capacitor	
C120	0.1MF		SMD Multilayer Ceramic Capacitor	
C121	0.1MF		SMD Multilayer Ceramic Capacitor	
C122	33pF		SMD Multilayer Ceramic Capacitor	
C123	1nF		SMD Multilayer Ceramic Capacitor	
C124	22MF	16V	Aluminium Electrolytic Capacitor	
C125	10MF	16V	Aluminium Electrolytic Capacitor	
C126	10MF	16V	Aluminium Electrolytic Capacitor	
R1	10	5W	Aluminium Clad Wirewound Resistor	
R2	10K	1/4W	SMD Thick Film Resistor	
R3	15K	1/4W	SMD Thick Film Resistor	
R4	10K	1/4W	SMD Thick Film Resistor	
R5	820	1/4W	SMD Thick Film Resistor	
R6	47	1/4W	SMD Thick Film Resistor	
R7	75	1/4W	SMD Thick Film Resistor	
R8	27	1/4W	SMD Thick Film Resistor	
R9	47	1/4W	SMD Thick Film Resistor	
R10	47	1/4W	SMD Thick Film Resistor	
R11	820	1/4W	SMD Thick Film Resistor	
R12	15K	1/4W	SMD Thick Film Resistor	
R13	33K	1/4W	SMD Thick Film Resistor	
R14	100K	1/4W	SMD Thick Film Resistor	
R15	27K	1/4W	SMD Thick Film Resistor	
R16	47K	1/4W	SMD Thick Film Resistor	
R17	33K	1/4W	SMD Thick Film Resistor	
R18	150K	1/4W	SMD Thick Film Resistor	
R19	2K	1/4W	Cermet Skeleton Trimmer Resistor	
R20	1K	1/4W	SMD Thick Film Resistor	
R21	2K	1/4W	Cermet Skeleton Trimmer Resistor	
R22	1K5	1/4W	SMD Thick Film Resistor	
R23	50K	1/4W	Multi Turn Cermet Trimmer Resistor	
R24	47K	1/4W	SMD Thick Film Resistor	
R25	100K	1/4W	SMD Thick Film Resistor	
R26	39K	1/4W	SMD Thick Film Resistor	

NICOM

Rif.	Value	Remarks	Description	Code
R27	10K	1/4W	SMD Thick Film Resistor	
R28	15K	1/4W	SMD Thick Film Resistor	
R29	20K	1/4W	Cermet Skeleton Trimmer Resistor	
R30	120K	1/4W	SMD Thick Film Resistor	
R31	100K	1/4W	SMD Thick Film Resistor	
R32	33	1/4W	SMD Thick Film Resistor	
R33	100K	1/4W	SMD Thick Film Resistor	
R34	10K	1/4W	SMD Thick Film Resistor	
R35	220K	1/4W	SMD Thick Film Resistor	
R36	220K	1/4W	SMD Thick Film Resistor	
R37	560	1/4W	SMD Thick Film Resistor	
R38	33	1/4W	SMD Thick Film Resistor	
R39	0	1/4W	SMD Thick Film Resistor	
R40	33	1/4W	SMD Thick Film Resistor	
R41	33	1/4W	SMD Thick Film Resistor	
R42	2K	1/4W	Cermet Skeleton Trimmer Resistor	
R43	15K	1/4W	SMD Thick Film Resistor	
R44	100K	1/4W	SMD Thick Film Resistor	
R45	1K8	1/4W	SMD Thick Film Resistor	
R46	3K9	1/4W	SMD Thick Film Resistor	
R47	180K	1/4W	SMD Thick Film Resistor	
R48	180K	1/4W	SMD Thick Film Resistor	
R49	180K	1/4W	SMD Thick Film Resistor	
R50	SIP 9 / 10K	1/4W	SMD Thick Film Resistor	
R51	SIP 9 / 10K	1/4W	SMD Thick Film Resistor	
R52	1K2	1/4W	SMD Thick Film Resistor	
R53	0	1/4W	SMD Thick Film Resistor	
R54	15K	1/4W	SMD Thick Film Resistor	
R55	2K2	1/4W	SMD Thick Film Resistor	
R56	1K	1/4W	SMD Thick Film Resistor	
R57	180K	1/4W	SMD Thick Film Resistor	
R58	330K	1/4W	SMD Thick Film Resistor	
R59	180K	1/4W	SMD Thick Film Resistor	
R60	2K2	1/4W	SMD Thick Film Resistor	
R61	2K2	1/4W	SMD Thick Film Resistor	
R62	0	1/4W	SMD Thick Film Resistor	
R63	3K9	1/4W	SMD Thick Film Resistor	
R64	10K	1/4W	SMD Thick Film Resistor	
R65	5K	1/4W	Multi Turn Cermet Trimmer Resistor	
R66	12K	1/4W	SMD Thick Film Resistor	
R67	220	1/4W	SMD Thick Film Resistor	
R68	1K	1/4W	SMD Thick Film Resistor	
R69	3K9	1/4W	SMD Thick Film Resistor	
R70	100K	1/4W	SMD Thick Film Resistor	
R71	47	1/4W	SMD Thick Film Resistor	
R72	1M	1/4W	SMD Thick Film Resistor	
R73	680	1/4W	SMD Thick Film Resistor	
R74	1K	1/4W	SMD Thick Film Resistor	
R75	2M2	1/4W	SMD Thick Film Resistor	
R76	220	1/4W	SMD Thick Film Resistor	
R77	22	1/4W	SMD Thick Film Resistor	
R78	22	1/4W	SMD Thick Film Resistor	

NICOM

Rif.	Value	Remarks	Description	Code
R79	22	1/4W	SMD Thick Film Resistor	
R80	39	1/4W	SMD Thick Film Resistor	
R81	330	1/4W	SMD Thick Film Resistor	
R82	330	1/4W	SMD Thick Film Resistor	
R83	10	1/4W	SMD Thick Film Resistor	
R84	470	1/4W	SMD Thick Film Resistor	
R85	4K7	1/4W	SMD Thick Film Resistor	
R86	180	1/4W	SMD Thick Film Resistor	
R87	6K8	1/4W	SMD Thick Film Resistor	
R88	NC		SMD Thick Film Resistor	
R89	47K	1/4W	SMD Thick Film Resistor	
R90	22K	1/4W	SMD Thick Film Resistor	
R91	10	1/4W	SMD Thick Film Resistor	
R92	10	1/4W	SMD Thick Film Resistor	
R93	10K	1/4W	Cermet Skeleton Trimmer Resistor	
R94	18K	1/4W	SMD Thick Film Resistor	
R95	470	1/4W	SMD Thick Film Resistor	
R96	390	1/4W	SMD Thick Film Resistor	
R97	12	1/4W	SMD Thick Film Resistor	
R98	330	1/4W	SMD Thick Film Resistor	
R99	330	1/4W	SMD Thick Film Resistor	
R100	10	1/4W	SMD Thick Film Resistor	
R101	330	1/4W	SMD Thick Film Resistor	
R102	10	1/4W	SMD Thick Film Resistor	
R103	12	1/4W	SMD Thick Film Resistor	
R104	12K	1/4W	SMD Thick Film Resistor	
R105	390	1/4W	SMD Thick Film Resistor	
R106	6K8	1/4W	SMD Thick Film Resistor	
R107	2K	1/4W	Multi Turn Cermet Trimmer Resistor	
R108	6K8	1/4W	SMD Thick Film Resistor	
R109	2K	1/4W	Multi Turn Cermet Trimmer Resistor	
R110	22K	1/4W	SMD Thick Film Resistor	
R111	47K	1/4W	SMD Thick Film Resistor	
R112	10K	1/4W	Cermet Skeleton Trimmer Resistor	
R113	47K	1/4W	SMD Thick Film Resistor	
R114	1K8	1/4W	SMD Thick Film Resistor	
R115	47K	1/4W	SMD Thick Film Resistor	
R116	27K	1/4W	SMD Thick Film Resistor	
R117	47K	1/4W	SMD Thick Film Resistor	
R118	27K	1/4W	SMD Thick Film Resistor	
R119	47K	1/4W	SMD Thick Film Resistor	
R120	4K7	1/4W	SMD Thick Film Resistor	
R121	47K	1/4W	SMD Thick Film Resistor	
R122	330	1/4W	SMD Thick Film Resistor	
R123	560	1/4W	SMD Thick Film Resistor	
R124	560	1/4W	SMD Thick Film Resistor	
R125	47K	1/4W	SMD Thick Film Resistor	
R126	47K	1/4W	SMD Thick Film Resistor	
R127	47K	1/4W	SMD Thick Film Resistor	
L1	4.7mH		Ferrite Drum Cored Inductor	
L2	CHOKE		Suppression Choke	

NICOM

Rif.	Value	Remarks	Description	Code
L3	22uH		Ferrite Drum Cored Inductor	
L4	NC			
L5	10mH		Ferrite Drum Cored Inductor	
L6	2.2uH		SMD Inductor	
L7	8T/0.6D		Enamelled Copper Wire	
L8	22uH		SMD Inductor	
L9	22uH		SMD Inductor	
L10	18T/0.4D		Enamelled Copper Wire	
L11	3T/.6D		Tinned Copper Wire	
L12	3T/.6D		Tinned Copper Wire	
L13	2T/.6D		Enamelled Copper Wire	
L14	3T/.6D		Tinned Copper Wire	
L15	CHOKE		Suppression Choke	
L16	CHOKE		Suppression Choke	
L17	CHOKE		Suppression Choke	
L18	CHOKE		Suppression Choke	
L19	CHOKE		Suppression Choke	
D1	1N4007		Power Diode	
D2	1N4007		Power Diode	
D3	1N4007		Power Diode	
D4	1N4007		Power Diode	
D5	1N4148		SMD Power Diode	
D6	1N4148		SMD Power Diode	
D7	1N4148		SMD Power Diode	
D8	1N4148		SMD Power Diode	
D9	1N4148		SMD Power Diode	
D10	1N4148		SMD Power Diode	
D11	1N4148		SMD Power Diode	
D12	1N4148		SMD Power Diode	
D13	1N4148		SMD Power Diode	
D14	1N4148		SMD Power Diode	
D15	LED		SMD Light Emitting Diode	
D16	MV209		Tuning Diode	
D17	MV209		Tuning Diode	
D18	MV209		Tuning Diode	
D19	MV209		Tuning Diode	
D20	MV209		Tuning Diode	
D21	MV209		Tuning Diode	
D22	5V6		SMD Diode Zener	
D23	12V		SMD Diode Zener	
D24	1N4148		SMD Power Diode	
D25	1N4148		SMD Power Diode	
D26	5V6		SMD Diode Zener	
D27	5V6		SMD Diode Zener	
D28	5V6		SMD Diode Zener	
Q1	TIP41C		Medium Power Bipolar Transistor	
Q2	BD244C		Medium Power Bipolar Transistor	
Q3	BC109		Low Power Bipolar Transistor	
Q4	BC547		Low Power Bipolar Transistor	
Q5	2N2369		Low Power Bipolar Transistor	

[illegible]

NICOM

Part List Schematic : RFAMP20W

Rif.	Value	Remarks	Description	Code
C1	1nF		Ceramic Lead Through Capacitor	
C2	1nF		Ceramic Lead Through Capacitor	
C3	1nF		Ceramic Lead Through Capacitor	
C4	1nF		Ceramic Lead Through Capacitor	
C5	1nF		Ceramic Lead Through Capacitor	
C6	1nF		Ceramic Lead Through Capacitor	
C7	10pF		SMD Multilayer Ceramic Capacitor	
C8	18pF		SMD Multilayer Ceramic Capacitor	
C9	10pF		SMD Multilayer Ceramic Capacitor	
C10	10MF	50V	SMD Aluminium Electrolytic Capacitor	
C11	47nF		SMD Multilayer Ceramic Capacitor	
C12	2.2nF		SMD Multilayer Ceramic Capacitor	
C13	15pF		SMD Multilayer Ceramic Capacitor	
C14	15pF		SMD Multilayer Ceramic Capacitor	
C15	220pF		SMD Multilayer Ceramic Capacitor	
C16	8.2pF		SMD Multilayer Ceramic Capacitor	
C17	8.2pF		SMD Multilayer Ceramic Capacitor	
C18	22pF		SMD Multilayer Ceramic Capacitor	
C19	470pF		SMD Multilayer Ceramic Capacitor	
C20	470pF		SMD Multilayer Ceramic Capacitor	
C21	8.2pF		SMD Multilayer Ceramic Capacitor	
C22	8.2pF		SMD Multilayer Ceramic Capacitor	
C23	39pF		SMD Multilayer Ceramic Capacitor	
C24	10nF		SMD Multilayer Ceramic Capacitor	
C25	10nF		SMD Multilayer Ceramic Capacitor	
C26	100pF		SMD Multilayer Ceramic Capacitor	
C27	120pF		SMD Multilayer Ceramic Capacitor	
C28	1.5pF		SMD Multilayer Ceramic Capacitor	
C29	220pF		SMD Multilayer Ceramic Capacitor	
C30	8.2pF		SMD Multilayer Ceramic Capacitor	
C31	8.2pF		SMD Multilayer Ceramic Capacitor	
C32	68pF		SMD Multilayer Ceramic Capacitor	
C33	4.7pF		SMD Multilayer Ceramic Capacitor	
C34	68pF		SMD Multilayer Ceramic Capacitor	
C35	15pF		SMD Multilayer Ceramic Capacitor	
C36	47pF		SMD Multilayer Ceramic Capacitor	
C37	47pF		SMD Multilayer Ceramic Capacitor	
C38	82pF		SMD Multilayer Ceramic Capacitor	
C39	10nF		SMD Multilayer Ceramic Capacitor	
C40	27pF		SMD Multilayer Ceramic Capacitor	
C41	27pF		SMD Multilayer Ceramic Capacitor	
C42	22pF		SMD Multilayer Ceramic Capacitor	
C43	5.6pF		SMD Multilayer Ceramic Capacitor	
C44	5.6pF		SMD Multilayer Ceramic Capacitor	
C45	10nF		SMD Multilayer Ceramic Capacitor	
C46	68pF		SMD Multilayer Ceramic Capacitor	
C47	470pF		SMD Multilayer Ceramic Capacitor	
C48	10nF		SMD Multilayer Ceramic Capacitor	
C49	220nF		SMD Multilayer Ceramic Capacitor	

NICOM

Rif.	Value	Remarks	Description	Code
C50	68pF		SMD Multilayer Ceramic Capacitor	
C51	470pF		SMD Multilayer Ceramic Capacitor	
C52	220nF		SMD Multilayer Ceramic Capacitor	
L1	CHOKE		Beads Ferroxcube Core	
MST1	INDUCTOR		Microstrip Inductor	
MST2	INDUCTOR		Microstrip Transmission Line	
MST3	INDUCTOR		Microstrip Inductor	
MST4	INDUCTOR		Microstrip Inductor	
MST5	INDUCTOR		Microstrip Transmission Line	
MST6	INDUCTOR		Microstrip Inductor	
MST7	INDUCTOR		Microstrip Transmission Line	
MST8	INDUCTOR		Microstrip Inductor	
MST9	INDUCTOR		Microstrip Transmission Line	
MST10	INDUCTOR		Microstrip Transmission Line	
MST11	INDUCTOR		Microstrip Transmission Line	
MST12	INDUCTOR		Microstrip Transmission Line	
MST13	INDUCTOR		Microstrip Transmission Line	
R1	10K	1/4W	SMD Thick Film Resistor	
R2	10K	1/4W	SMD Thick Film Resistor	
R3	150	1W	SMD Thick Film Resistor	
R4	56	1/4W	SMD Thick Film Resistor	
R5	22	1/4W	SMD Thick Film Resistor	
R6	150	1W	SMD Thick Film Resistor	
R7	1K8	1/4W	SMD Thick Film Resistor	
R8	150	1W	SMD Thick Film Resistor	
R9	47K	1/4W	SMD Thick Film Resistor	
R10	22	1/4W	SMD Thick Film Resistor	
R11	22	1/4W	SMD Thick Film Resistor	
R12	5K6	1/4W	SMD Thick Film Resistor	
R13	6.08	1/4W	SMD Thick Film Resistor	
R14	22K	1/4W	SMD Thick Film Resistor	
R15	220	1/4W	SMD Thick Film Resistor	
R16	220K	1/4W	SMD Thick Film Resistor	
R17	68K	1/4W	SMD Thick Film Resistor	
R18	68K	1/4W	SMD Thick Film Resistor	
R19	22K	1/4W	SMD Thick Film Resistor	
R20	1K5	1/4W	SMD Thick Film Resistor	
R21	100	1/4W	SMD Thick Film Resistor	
R22	12K	1/4W	SMD Thick Film Resistor	
R23	180	1/4W	SMD Thick Film Resistor	
R24	22K	1/4W	SMD Thick Film Resistor	
R25	330K	1/4W	SMD Thick Film Resistor	
R26	390K	1/4W	SMD Thick Film Resistor	
R27	2M7	1/4W	SMD Thick Film Resistor	
R28	2K2	1/4W	SMD Thick Film Resistor	
R29	68	1/4W	SMD Thick Film Resistor	
R30	68	1/4W	SMD Thick Film Resistor	
R31	2K2	1/4W	SMD Thick Film Resistor	
R32	68K	1/4W	SMD Thick Film Resistor	

[illegible]