

BF 1083-U SK 1063-U

KURZBESCHREIBUNG

Der Sender BF 1083-U / SK 1063-U ist ein speziell auf die drahtlose Mikrofonübertragung ausgelegter Taschensender im UHF-Bereich. Das Ansteckmikrofon MKE 2-1053 wird aus dem Sender mit Strom versorgt. Am Sender läßt sich die Mikrofonempfindlichkeit umschalten, um verzerrungs- und rauschfrei zu arbeiten.

MERKMALE

- kompakt und bedienfreundlich
- 16 Kanäle umschaltbar
- Lizenzierung in allen wesentlichen Märkten
- Empfindlichkeitsschalter für den Mikrofoneingang
- einfacher Betrieb mit 9-Volt-Block
- 8 Stunden Betriebszeit mit Alkali-Mangan-Batterie
- 116 dB Geräuschspannungsabstand
- Lademöglichkeit im Ladegerät L 2032 (nur SK 1063-U)

BRIEF DESCRIPTION

The BF 1083-U / SK 1063-U body-pack UHF transmitter has been especially designed for use with miniature microphones. The MKE 2-1053 clip-on microphone is powered via the body-pack UHF transmitter, the microphone sensitivity can easily be selected on the transmitter to ensure optimum transmission.

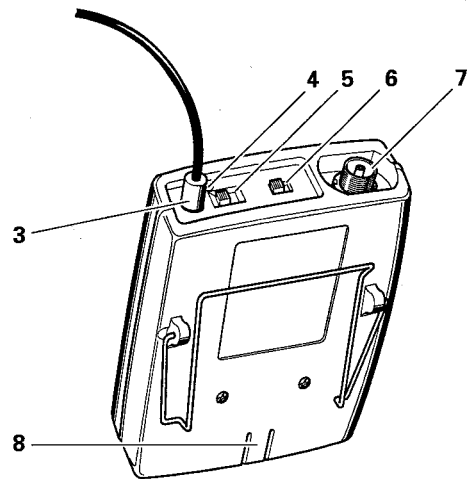
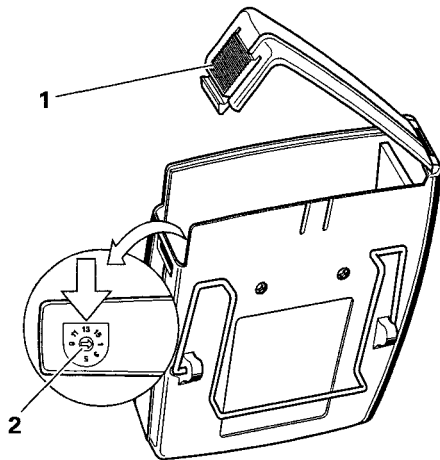
FEATURES

- Compact design, easy to operate
- 16 switchable channels
- Frequencies approved in most major countries
- Sensitivity switch for the microphone input
- Operation on a 9 V PP3 battery
- 8 hours of continuous operation with one alkaline manganese battery
- Signal-to-noise ratio 116 dB
- Rechargeable in L 2032 double charger (SK 1063-U, only)

INHALTSVERZEICHNIS	SEITE
1 BEDIENUNGSELEMENTE	3
2 TECHNISCHE DATEN	3
3 ALLGEMEINES	5
3.1 INHALT	
3.2 SERVICE-KONZEPT	
4 SERVICE HINWEISE	6
4.1 ALLGEMEINES	
4.2 DEMONTAGE	
4.3 FEHLERSUCHE	
5 FEHLERSUCHE	7
5.1 MESSAUFBAU I	
6 MESSGERÄTE UND PRÜFMITTEL	8
7 MESSAUFBAU II	8
8 PRÜF- UND ABGLEICHANLEITUNG	9
9 BLOCKSCHALTBILD	11
10 STROMLAUPLÄNE	12
10.1 BF 1083-U / SK 1063-U, NF-TEIL	
10.2 BF 1083-U / SK 1063-U, HF-TEIL	
11 GEDRUCKTE SCHALTUNG	14
11.1 BF 1083-U / SK 1063-U, BESTÜCKUNGSSEITE	
11.2 BF 1083-U / SK 1063-U, LÖTSEITE	
12 EXPLOSIONSZEICHNUNG	16
12.1 BF 1083-U	
12.2 SK 1063-U	
13 ERSATZTEILE	18

CONTENTS	PAGE
1 OPERATING ELEMENTS	4
2 TECHNICAL DATA	4
3 GENERAL	5
3.1 CONTENTS	
3.2 SERVICING	
4 SERVICE INSTRUCTIONS	6
4.1 GENERAL	
4.2 DISASSEMBLY	
4.3 TROUBLESHOOTING	
5 TROUBLESHOOTING	7
5.1 TEST SET-UP I	
6 SPECIAL TOOLS AND EQUIPMENT	8
7 TEST SET-UP II	8
8 TEST AND ALIGNMENT INSTRUCTIONS	10
9 BLOCK DIAGRAM	11
10 CIRCUIT DIAGRAMS	12
10.1 BF 1083-U / SK 1063-U, AF SECTION	
10.2 BF 1083-U / SK 1063-U, RF SECTION	
11 PRINTED CIRCUIT BOARD	14
11.1 BF 1083-U / SK 1063-U, COMPONENT SIDE	
11.2 BF 1083-U / SK 1063-U, SOLDER SIDE	
12 EXPLODED VIEW	16
12.1 BF 1083-U	
12.2 SK 1063-U	
13 SPARE PARTS	18

1 BEDIENUNGSELEMENTE



- 1 Batteriefach
- 2 Kanalwahlschalter
- 3 Antennenanschlußbuchse
- 4 Betriebsanzeige
- 5 Ein / Aus - Schalter
- 6 Schaltbare Mikrofonempfindlichkeit
- 7 Mikrofonanschlußbuchse
- 8 Ladekontakte (nur SK 1063-U)

2 TECHNISCHE DATEN

HF-TEIL

Frequenzaufbereitung
 Trägerfrequenz
 Max. Schaltbandbreite
 Kanalzahl
 Kanalraster
 Frequenzstabilität
 Sendeleistung / Abgestrahlte Leistung
 Störstrahlungsleistung
 Modulationsart
 Nennhub / Spitzenhub bei 1 kHz

PLL (Phase-Locked-Loop)-Synthesizer
 574 - 960 MHz (3 Bereiche)
 32 MHz
 16 Kanäle, umschaltbar
 ≥ 10 kHz
 besser ± 10 kHz (- 10 bis + 55 °C, $U_B = 6,0 - 10,0$ VDC)
 max. 30 mW / max. 20 mW
 < 4 nW
 FM, Breitband
 ± 40 kHz / ± 56 kHz

NF-TEIL

Frequenzgang (+ 1 / - 3 dB)
 Geräuschspannungsabstand nach DIN 45412
 NF-Empfindlichkeit für Nennhub (0 dB / - 20 dB)
 NF-Empfindlichkeit für Spitzenaussteuerung (0 dB / - 20 dB)
 Eingangswiderstand
 Einstellumfang des Empfindlichkeitsschalters
 Trittschallfilter Roll-Off (Eckfrequenz 80 Hz)
 High-Cut Roll-Off (Eckfrequenz 20 kHz)
 Klirrfaktor
 Preemphasis
 Rausch- und Störunterdrückungssystem

80 - 20000 Hz
 116 dB (A)
 110 / 850 mVeff
 220 mVeff / 1,7 Veff
 5 k Ω
 20 dB
 18 dB / Okt.
 24 dB / Okt.
 < 1 % bei Spitzenhub, $< 0,3$ % bei Nennhub
 50 μ s
 HiDynplus

ALLGEMEINES

Batterie
 Betriebszeit
 Stromaufnahme bei Nennspannung
 Betriebsspannungsbereich
 Abmessungen in mm
 Gewicht
 BZT - Zulassungsnummer

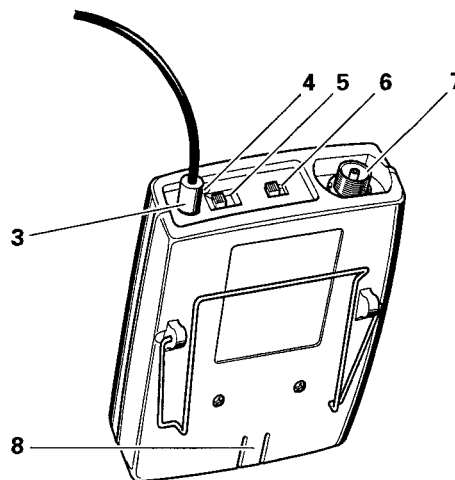
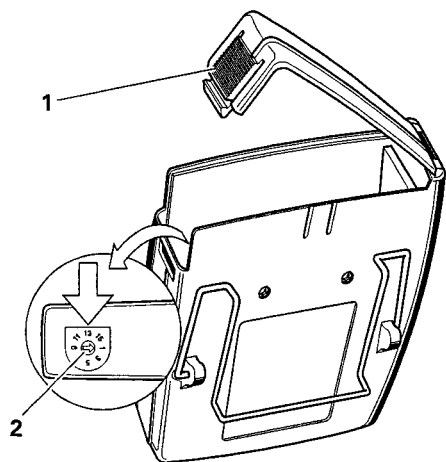
IEC 6 LR 61 9 V
 ≥ 8 Stunden mit Alkali-Mangan-Batterie (z.B. Varta Nr. 4022)
 ≥ 2 Stunden mit BA 1032 (SK 1063-U)
 typ. 49 mA (≤ 53 mA)
 6,0 - 10,0 VDC
 105 x 63 x 26
 ca. 155 g incl. Batterie
 A120 209F RF

MIKROFON MKE 2-1053 (nur bei BF 1083-U im Lieferumfang)

Richtcharakteristik
 Grenzschalldruckpegel
 Kabellänge
 Abmessungen
 Steckverbinder

Kugel
 130 dB bei 1 kHz (k = 1%)
 1,5 m
 \varnothing 4 mm
 LEMO koaxial

1 OPERATING ELEMENTS



- 1 Battery compartment
- 2 Channel selector switch
- 3 Antenna socket
- 4 Operation indicator
- 5 On / off switch
- 6 Sensitivity switch
- 7 Microphone socket
- 8 Charging contacts (SK 1063-U only)

2 TECHNICAL DATA

RF SECTION

Frequency generation
 Total transmitter bandwidth
 Max. switching bandwidth
 Transmission channels
 Channel grid
 Frequency stability
 RF output power / radiated power
 Spurious emission
 Modulation
 Nominal / peak deviation at 1 kHz

PLL (Phase Locked Loop) synthesizer
 574 - 960 MHz (3 ranges)
 32 MHz
 16 switchable UHF channels
 ≥ 10 kHz
 $> \pm 10$ kHz (-10 to +55 °C, $V_0 = 6.0 - 10.0$ VDC)
 max. 30 mW / max. 20 mW
 < 4 nW
 FM wideband
 ± 40 kHz / ± 56 kHz

AF SECTION

Frequency response range (+1 / -3 dB)
 Signal-to-noise ratio according to DIN 45412
 AF input sensitivity for nominal deviation (0 dB / -20 dB)
 AF input voltage for peak deviation (0 dB / -20 dB)
 Input impedance
 Sensitivity switch
 Roll-off filter (Cut-off frequency 80 Hz)
 High-cut roll-off (Cut-off frequency 20 kHz)
 THD at 1 kHz
 Pre-emphasis
 Compander

80 - 20,000 Hz
 116 dB (A)
 110 / 850 mVeff
 220 mVeff / 1.7 Veff
 5 k Ω
 20 dB
 18 dB / Oct.
 24 dB / Oct.
 $< 1\%$ at peak deviation, $< 0.3\%$ for nominal deviation
 50 μ s
 HiDynplus

POWER SUPPLY, OTHER

Battery
 Operating time

 Current consumption at 9 V
 Operating voltage
 Dimensions in mm
 Weight
 German BZT-No.

9 V PP3 (IEC 6 LR 61), alkaline-manganese
 ≥ 8 hrs with alkaline-manganese-battery (e.g. Varta no. 4022)
 ≥ 2 hrs with BA 1032 (SK 1063-U)
 typ. 49 mA (≤ 53 mA)
 6.0 - 10.0 VDC
 105 x 63 x 26
 approx. 155 g incl. battery
 A120 209F RF

MKE 2-1053 MICROPHONE (BF 1083-U delivery)

Directivity
 Sensitivity
 Cord length
 Dimensions
 Plug jack

omni-directional
 130 dB at 1 kHz ($k = 1\%$)
 1.5 m
 diameter 4 mm
 LEMO co-axial plug

3 ALLGEMEINES

3.1 INHALT

Die Service-Anleitung vermittelt das entsprechende Wissen zur Fehlerlokalisierung und Reparatur des BF1083-U/SK1063-U.

Auf geeigneten Meßplätzen kann die Reparatur der Leiterplatten bis auf Bauteilebene erfolgen. Detaillierte Reparaturanleitungen befinden sich in den Service-Hinweisen und der Prüf- und Abgleichanleitung.

3.2 SERVICE-KONZEPT

3.2.1 Leiterplatte

Die Leiterplatte des BF 1083-U / SK 1063-U ist als 2-seitig kupferkaschierte Platine aufgebaut und kann durch einen unsachgemäßen Reparaturversuch irreparabel beschädigt werden.

3.2.2 Service-Anleitung

Die Service-Anleitung soll dem Techniker die Möglichkeit bieten, die wichtigsten Reparatur- und Abgleicharbeiten ausführen zu können.

Die Service-Anleitung kann im Bedarfsfall auch dem Kunden ausgehändigt werden.

3.2.3 SMD (Surface Mounted Devices)

Die Leiterplatten des BF 1083-U / SK 1063-U sind weitgehend mit Chip-Elementen (SMD) bestückt. Sollte beim Hantieren mit den Baugruppen ein SMD mechanisch zerstört werden, ist es erforderlich, dieses Bauelement zu ersetzen.

SMD werden direkt auf die dafür vorgesehenen Lötflächen gelötet. Hierfür besitzen sie lötfähige Stirnkontaktierungen, die weitgehend hitzeunempfindlich sind.

Zum Auswechseln ist folgendes Werkzeug erforderlich: Neben einer Pinzette und einem normalen temperaturgeregelten LötKolben (z. B. Weller mit 0,8 mm Flachkopflötspitze PT-H 7 oder 0,8 mm Langkopflötspitze PT-K 7) sollten noch ein absolut rückschlagfreies Absauggerät und 1,2 mm Entlötlitze vorhanden sein. Sinnvoll ist eine Arbeitslupe.

Die Lötzeit ist so kurz wie möglich zu halten, damit die Leiterbahnen nicht beschädigt werden. Besonders beim Auslöten der Bauteile ist darauf zu achten, daß die Leiterbahnen nicht abgehoben werden. Danach ist die Auflagefläche der Bauteile von Lötresten zu säubern. Um mechanische Spannungen in den Bauteilen zu vermeiden, sollte man erst nach dem Erkalten der ersten Lötstelle die gegenüberliegende Seite anlöten.

Eine Wiederverwendung eines bereits ausgelöteten Chip-Bauelementes ist nicht zulässig. Dies gilt auch dann, wenn es offensichtlich fehlerfrei ist, da durch die mechanische Beanspruchung beim Ein- und Auslöten eine Beschädigung nicht ausgeschlossen werden kann.

Die SMD werden als Ersatzteile in Packeinheiten von je 50 Stück geliefert. Die Lagerbehälter müssen verwechslungssicher gekennzeichnet sein, da nur dadurch eine Unterscheidung der Bauteile möglich ist.

3 GENERAL

3.1 CONTENTS

This service manual contains instructions for troubleshooting and repairing the BF 1083-U / SK 1063-U.

With the necessary measuring and test equipment, you can repair defective units down to the component level. Detailed instructions for repairs are given in the service instructions and the test and alignment instructions.

3.2 SERVICING

3.2.1 Printed circuit board

The BF 1083-U / SK 1063-U uses a double-sided printed circuit board. Improper repair or handling will damage the PCB irreparably!

3.2.2 Service manual

This service manual is intended for engineers or technicians. It shall enable them to carry out the most important repairs and alignments.

If necessary, the manual may also be given to customers.

3.2.3 SMDs (Surface Mounted Devices)

The PCB of the BF 1083-U / SK 1063-U body-pack transmitter is predominantly populated with surface mount devices (SMDs). Any SMD damaged during handling must be replaced.

Solder the SMDs directly to the provided substrate lands. Their end caps have a solderable coating and are largely insensitive to heat.

For replacing SMDs, you need the following tools: tweezers, temperature-controlled soldering iron (e.g. Weller with 0.8 mm PT-H 7 flat-headed soldering tip or 0.8 mm PT-K 7 oblong soldering tip), blow-back-proof unsoldering set. 1.2 mm unsoldering wire. It is recommendable using a magnifying glass.

Keep soldering time as short as possible to not damage the conductors. Take care that you do not tear off the solder tracks when unsoldering components and taking them off. Remove all remaining solder from the components' lands. To avoid stress within the components, solder one side first, then wait until this joint has cooled down before you solder the opposite side.

Unsoldered SMDs must not be reused, even if the component looks faultless. During soldering and unsoldering the component is subject to thermal stress, so defects cannot be excluded.

Spare SMDs come in bags of 50 components. You should label your storage containers so that you can distinguish between different components.

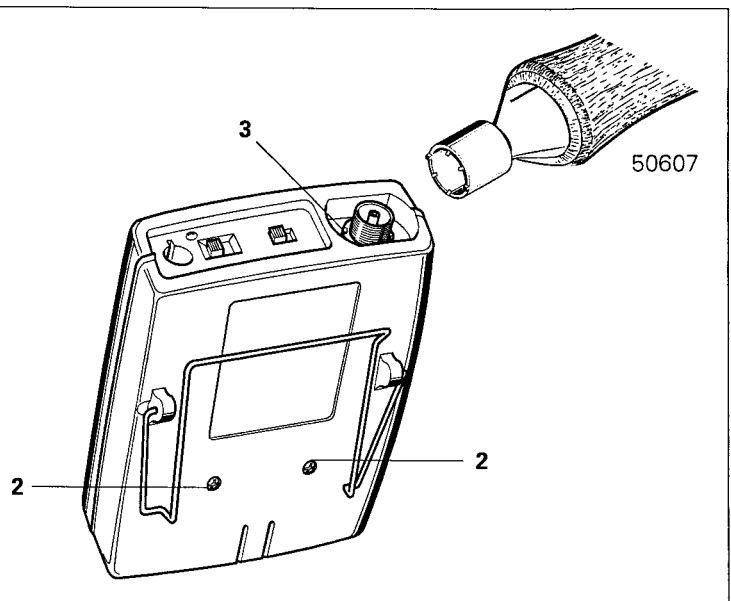
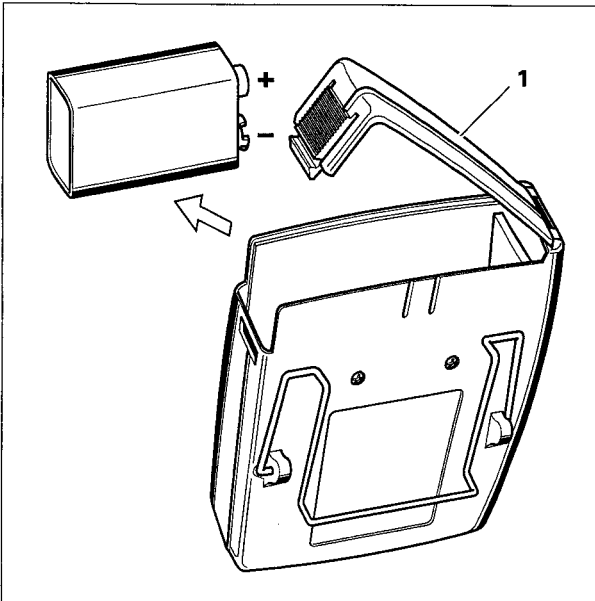
4 SERVICE HINWEISE

4.1 ALLGEMEINES

Je nach Bestückung der frequenzabhängigen Bauelemente ist der Taschensender BF 1083-U / SK 1063-U in 3 Bereichen des UHF - Bandes einsetzbar (siehe Tabelle "Frequenzbereiche" auf Seite 13). Die Auswahl des Kanalfrequenzbereiches (Schaltbandbreite) ergibt sich durch den Abgleich und die Wahl des PROM - Bausteins U3.

4.2 DEMONTAGE

- Taschensender BF 1083-U / SK 1063-U ausschalten.
- Mikrofonstecker lösen und entnehmen.
- Antennenstecker lösen und entnehmen.
- Batteriefach (1) öffnen und Batterie entnehmen.
- Schrauben (2) lösen und entnehmen.
- Ringmutter und Zahnscheibe (3) mit Spezialschlüssel (Ersatzteilnummer 50607) lösen und entnehmen.
- Leiterplatte aus Gehäuse schieben.



4.3 FEHLERSUCHE

- Taschensender BF 1083-U / SK 1063-U besprechen und mit Empfänger EM 1031-U (Kopfhörer) abhören. Funktionsüberprüfung mit anschließendem Abklopfen und Reichweitentest.
- Taschensender BF 1083-U / SK 1063-U demontieren.
- Die Fehlersuche beim BF 1083-U / SK 1063-U unterteilt sich in:
 - Überprüfen der Testpunkte TP1 - TP24 auf der Lötseite der Leiterplatte. Dazu Verfahren wie im Abschnitt "FEHLERSUCHE" auf Seite 7. Bei stark abweichenden Meßwerten Leiterplatte unter Zuhilfenahme des Stromlaufplanes reparieren.
 - Durchführen der "PRÜF- UND ABGLEICHANWEISUNG".
- Taschensender BF 1083-U / SK 1063-U montieren.
- Taschensender BF 1083-U / SK 1063-U besprechen und mit Empfänger EM 1031-U (Kopfhörer) abhören. Funktionsüberprüfung mit anschließendem Abklopfen und Reichweitentest.

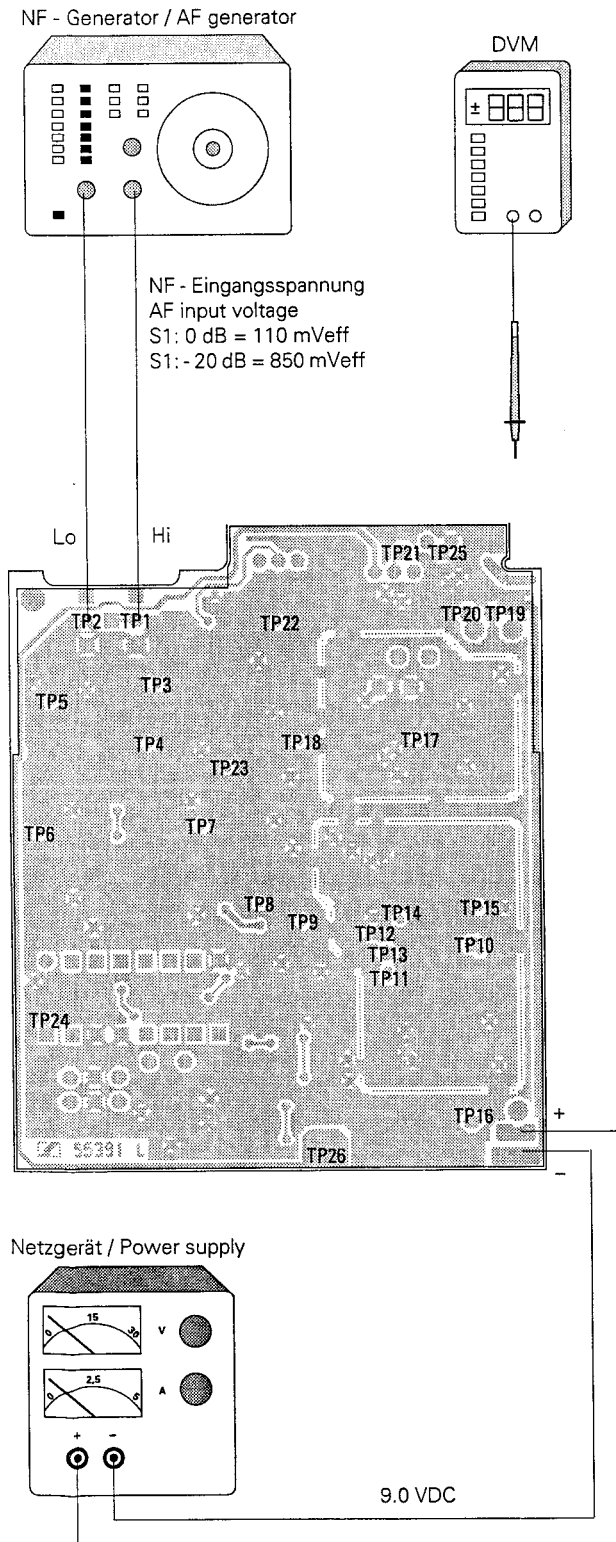
4.3 TROUBLESHOOTING

- Talk into the transmitter's microphone. Use an EM 1031-U receiver and a headphone to listen to the audio signal. Check the functioning of the body-pack transmitter, knock at the housing to see whether there are loose contacts and test the transmitter's range.
- Disassemble the body-pack transmitter.
- Troubleshooting falls into two parts:
 - Check test points TP1 to TP24 on the PCB's solder side. Follow the instructions given in the chapter "TROUBLESHOOTING" on page 7. If the measured values deviate strongly from the required values, the PCB should be repaired using the circuit diagram.
 - Carry out the "TEST AND ALIGNMENT INSTRUCTIONS".
- Reassemble the body-pack transmitter.
- Talk into the transmitter's microphone again. Listen to the audio signal with the EM 1031-U and the headphone. Check the functioning of the body-pack transmitter, knock at the housing to see whether there are loose contacts and test the transmitter's range.

5 FEHLERSUCHE

5.1 MESSAUFBAU I

- NF-Signal (1kHz, 110 mV bzw. 850 mV) an TP1 einspeisen (TP2 ⊥).
- Betriebsspannung (9.0 VDC, Strombegrenzung 70 mA) an Batteriekontakte anlegen.
- Kanalwahlschalter S2 in Stellung "8" bringen.
- Ein / Aus Schalter S4 in Stellung "ON" bringen.
- Testpunkte mit DC-Voltmeter und NF-Voltmeter überprüfen.



5 TROUBLESHOOTING

5.1 TEST SET-UP I

- Feed an audio signal (1 kHz, 110 mV or 850 mV, respectively) to TP1 (TP2 ⊥).
- Apply a 9.0 VDC voltage to the battery contacts (current limited to 70 mA).
- Set the channel selector switch S2 to "8".
- Switch the transmitter on with switch S4.
- Check all test points with a DC voltmeter and an AF voltmeter (see table).

Testpunkt Test point	Sollwert (DC) Desired value (DC)	Sollwert (NF effektiv) Desired value (AF eff.)
TP 1	8.2 VDC	S1: 0 dB = 110 mVeff S1: -20 dB = 850 mVeff
TP 2	-	-
TP 3	0.6 VDC	95 mVeff
TP 4	4.7 VDC	775 mVeff
TP 5	4.1 VDC	775 mVeff
TP 6	3.7 VDC	775 mVeff
TP 7	1.6 VDC	-
TP 8	3.1 VDC	775 mVeff
TP 9	-	350 mVeff
TP 10	1.4 VDC	-
TP 11	0.8 VDC	-
TP 14	0.8 VDC	-
TP 15	4.0 VDC	-
TP 16	0.5 - 4.5 VDC	-
TP 17	1.2 VDC	-
TP 18	8.6 VDC	-
TP 21	9.0 VDC	-
TP 22	4.1 VDC	-
TP 23	9.0 VDC	-
TP 24	4.3 VDC (140 μs)	-

6 MESSGERÄTE UND PRÜFMITTEL

- 1 Modulationsanalysator (z.B. Rohde & Schwarz FAM)
- 1 NF - Signalgenerator (z.B. Leader LAG 126 S)
- 1 NF - Millivoltmeter (z.B. UPM 550 - 1)
- 1 HF - Millivoltmeter (z.B. Rohde & Schwarz)
- 1 HiDyn Expander II (z.B. Sennheiser Ident.-Nr. 49556)
- 1 Oszilloskop (z.B. Hameg 605)
- 1 Voltmeter $R_i \geq 1 \text{ M}\Omega / \text{V}$ (z.B. Thandar TM 351)
- 1 Amperemeter (z.B. Thandar TM 351)
- 1 Netzgerät 0 - 30 V / 2 A

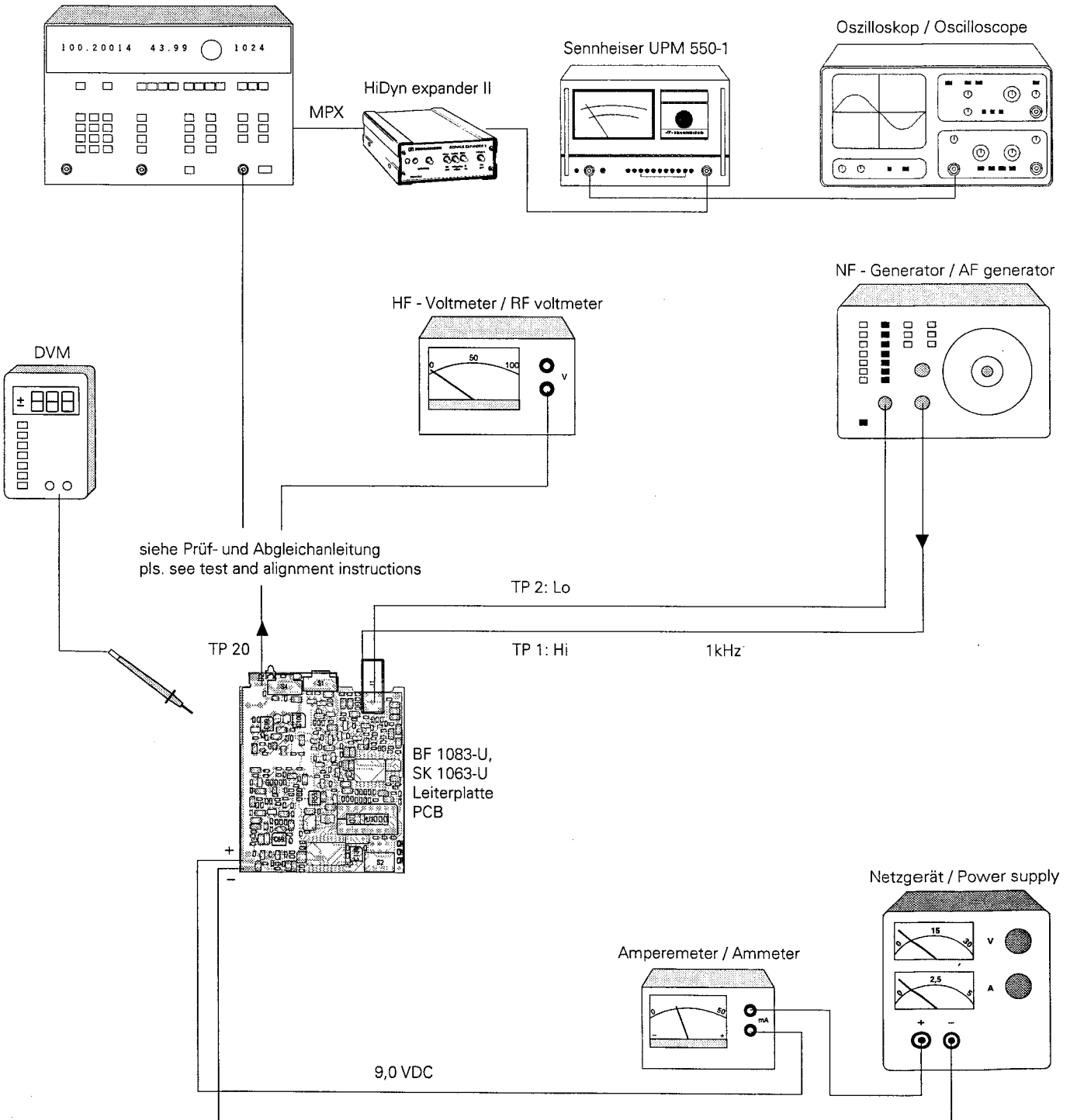
6 SPECIAL TOOLS AND EQUIPMENT

- 1 Modulation analyser (e.g. Rohde & Schwarz FAM)
- 1 AF signal generator (e.g. Leader LAG 126 S)
- 1 AF millivoltmeter (e.g. UPM 550 - 1)
- 1 RF millivoltmeter (e.g. Rohde & Schwarz)
- 1 HiDyn expander II (e.g. Sennheiser Ident. No. 49556)
- 1 Oscilloscope (e.g. Hameg 605)
- 1 Voltmeter $R_i \geq 1 \text{ M}\Omega / \text{V}$ (e.g. Thandar TM 351)
- 1 Ammeter (e.g. Thandar TM 351)
- 1 Power supply 0 - 30 V / 2 A

7 MESSAUFBAU II

7 TEST SET-UP II

Modulationsanalysator / Modulation analyzer



8 PRÜF - UND ABGLEICHANWEISUNG

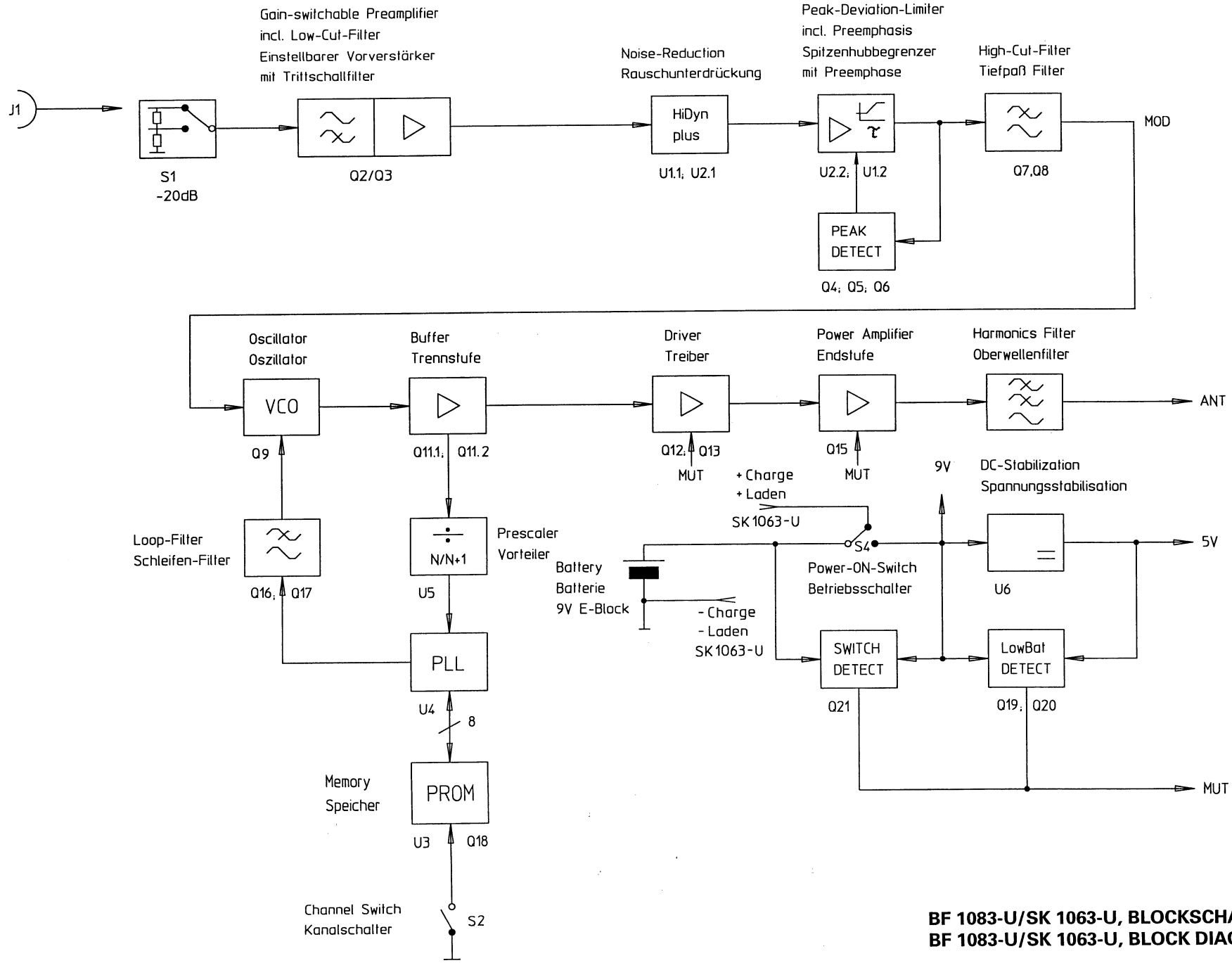
Nach jedem Betätigen des Kanalwahlschalters S2 ist der Sender mit Betriebsschalter S4 aus - und wieder einzuschalten, damit die PLL die neu eingestellte Frequenz aus dem PROM liest!

Nr.	Messung, Einstellung	Signal-einspeisung	Vorbereitung, Geräteeinstellung	Meßpunkt	Sollwert	Einsteller	Bemerkungen
1	Stromaufnahme	-	Batteriespannung (9 VDC) an Batteriekontakte anlegen; Kanalwahlschalter S2 auf mittleren Kanal innerhalb der Schaltbandbreite; Empfindlichkeit S1 "Hi"; Ein / Aus-Schalter S4 "ON";	Ampere-meter	45 - 52 mA		
2	VCO - Abstimmspannung	-	DC - Voltmeter	TP16	1,0 ... 2,0 VDC		
2.1	VCO - Abstimmspannung (obere Eckfrequenz)	-	Kanalwahlschalter S2 auf höchsten Kanal schalten; DC - Voltmeter	TP16	≤ 4,5 VDC	C69	Nach Betätigung des Kanalwahlschalters S2 Sender aus- und einschalten
2.2	VCO - Abstimmspannung (untere Eckfrequenz)	-	Kanalwahlschalter S2 auf niedrigsten Kanal schalten; DC - Voltmeter	TP16	≥ 0,5 VDC	C69	Nach Korrektur Abgleich 2 bis 2.2 überprüfen. Danach Abschirmdeckel auf Oszillatorkammer setzen
3	HF - Pegel	-	Kanalwahlschalter S2 auf mittleren Kanal innerhalb der Schaltbandbreite; HF - Voltmeter bzw. Modulationsanalysator	TP20	≥ 13 dBm, bzw. ≥ 1,0 V _{HF}	C99, C100	Evtl. Kopplung von L14, L15 anpassen. Nach dem Abgleich Abschirmdeckel auf Endstufenkammer setzen
3.1	Oberwellen	-	Spektrum - Analysator	TP20	≤ - 74 dBm		
4	Sendefrequenz	-	Modulationsanalysator; Kanalwahlschalter S2 auf sämtliche Kanäle schalten und Frequenzen überprüfen	TP20	Sollfrequenz ± 500 Hz	C136	Nach Betätigung des Kanalwahlschalters S2 Sender aus- und einschalten
5	Nennhub	NF - Signal (1 kHz, 110 mV) an TP1 einspeisen	Modulationsanalysator: Deemphasis ausschalten	TP20	± 40 kHz	R55	
5.1	Klirrfaktor bei Nennhub	wie 5.	Modulationsanalysator und Klirrfaktormessgerät	TP20	k ≤ 0,4 %		
5.2	Limiter	NF - Signal (1 kHz, 220 mV) an TP1 einspeisen	Modulationsanalysator	TP20	≤ ± 56 kHz		
5.3	Klirrfaktor bei Spitzenhub	wie 5.2	Modulationsanalysator und Klirrfaktormessgerät	TP20	k ≤ 1,3 %		
6	NF - Frequenzgang	NF - Signal 1 kHz, 7 mV an TP1	Modulationsanalysator: Deemphasis einschalten; NF - Voltmeter auf 0 dB eichen	TP20	Hub ca. 10 kHz entspricht 0 dB		
6.1	NF - Frequenzgang	NF - Signal 80 Hz, sonst wie 6	Modulationsanalysator und NF - Voltmeter	TP20	- 2 dB ± 1 dB		
6.2	NF - Frequenzgang	NF - Signal 10 kHz, sonst wie 6.1	Modulationsanalysator und NF - Voltmeter	TP20	0 dB ± 1,5 dB		
6.3	NF - Frequenzgang	NF - Signal 20 kHz, sonst wie 6.2	Modulationsanalysator und NF - Voltmeter	TP20	- 2 dB ± 1 dB		
7	Rauschpegel	NF - Eingang kurzschließen (TP2, TP1)	HiDyn-Expander ausschalten; Modulationsanalysator und NF - Voltmeter (CCIR peak)	TP20	≤ - 50 dBm		

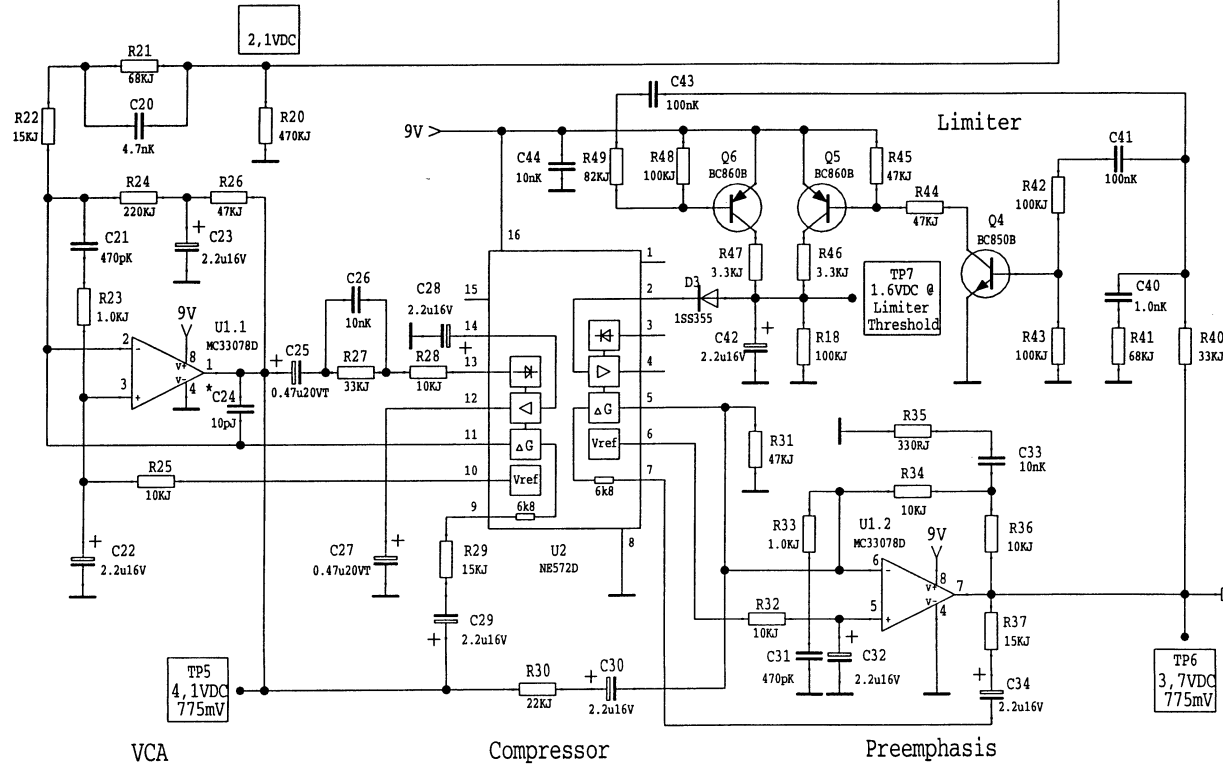
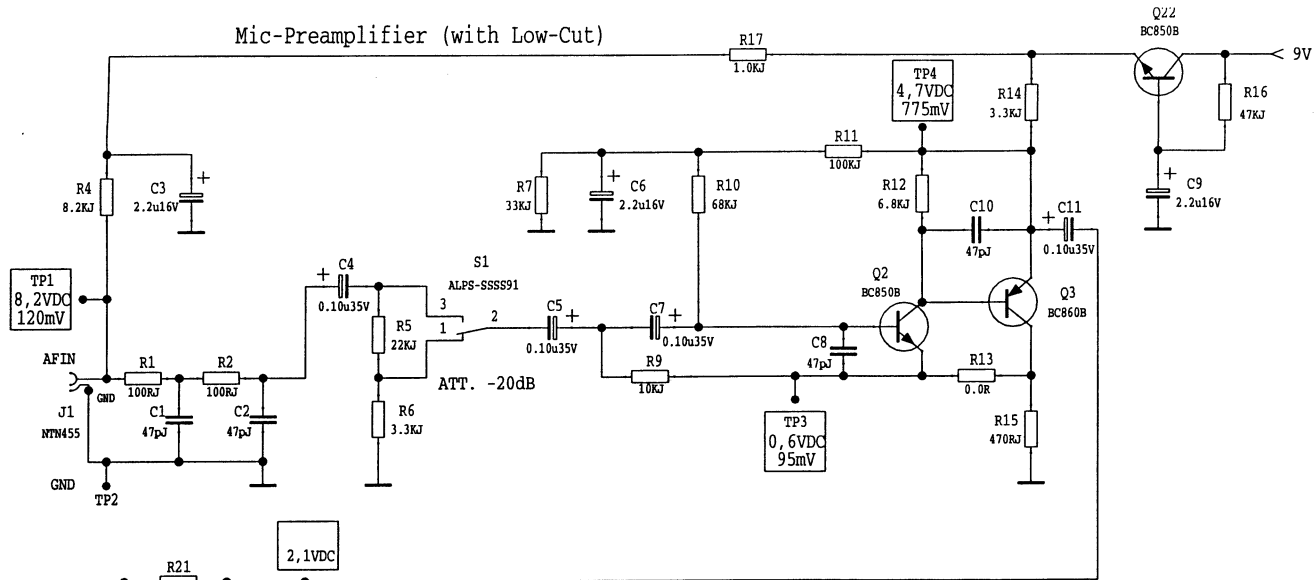
8 TEST AND ALIGNMENT INSTRUCTIONS

After operating the channel selector switch S2, you must switch the transmitter off and then on again (S4 = on/off switch) so that the PLL can read in the new frequency from the PROM!

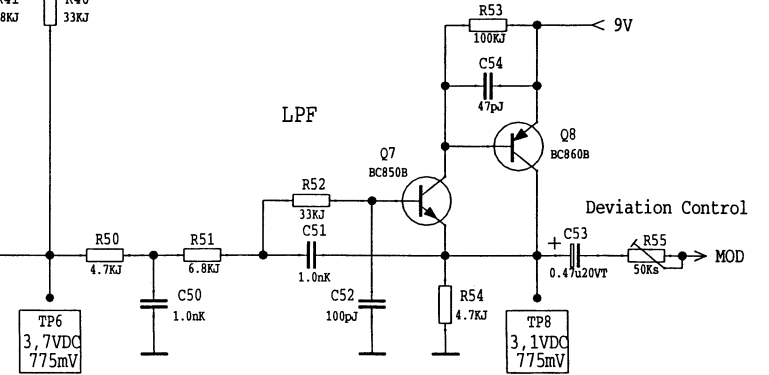
No.	Measurement, adjustment	Signal input	Preparations, settings	Test point	Required value	Adjust with	Remarks
1	Power consumption	-	Apply a 9 V DC battery voltage to the battery contacts; with switch S2, select the channel at the middle of the transmitter's switching bandwidth; set the sensitivity switch S1 to "Hi" and the ON/OFF switch S4 to "ON".	Ammeter	45 - 52 mA		
2	VCO tuning voltage	-	DC voltmeter	TP16	1.0 ... 2.0 VDC		
2.1	VCO tuning voltage (upper cut-off frequency)	-	Set channel selector switch S2 to the highest channel; DC voltmeter	TP16	≤ 4.5 VDC	C69	Switch the transmitter off and on again after selecting a new transmission frequency.
2.2	VCO tuning voltage (lower cut-off frequency)	-	Set channel selector switch S2 to the lowest channel; DC voltmeter	TP16	≥ 0.5 VDC	C69	After alignment, check 2 - 2.2 again. Then put the lid back onto the oscillator screen.
3	RF level	-	With switch S2, select the channel at the middle of the transmitter's switching bandwidth; RF voltmeter or modulation analyser	TP20	≥ 13 dBm, corresponds to $\geq 1.0 V_{RF}$	C99, C100	If necessary, adjust the coupling of coils L14 and L15. Then put the lid back onto the output stage screen.
3.1	Harmonics	-	Spectrum analyser	TP20	≤ -74 dBm		
4	Transmission frequencies	-	Modulation analyser; switch to all channels (S2) and check the frequencies.	TP20	Specified frequency ± 500 Hz	C136	Switch the transmitter off and on again after selecting a new transmission frequency.
5	Nominal deviation	Feed an AF signal (1 kHz, 110 mV) to TP1.	Modulation analyser; switch off de-emphasis.	TP20	± 40 kHz	R55	
5.1	THD at nominal deviation	as 5.	Modulation analyser and THD meter	TP20	THD ≤ 0.4 %		
5.2	Limiter	Feed an AF signal (1 kHz, 220 mV) to TP1.	Modulation analyser	TP20	$\leq \pm 56$ kHz		
5.3	THD at peak deviation	as 5.2	Modulation analyser and THD meter	TP20	THD ≤ 1.3 %		
6	AF frequency response	Feed an AF signal (1 kHz, 7 mV) to TP1.	Modulation analyser; switch on de-emphasis; calibrate AF voltmeter to 0 dB.	TP20	Deviation approx. 10 kHz, corresponds to 0 dB		
6.1	AF frequency response	80 Hz AF signal, otherwise as 6	Modulation analyser and AF voltmeter	TP20	-2 dB ± 1 dB		
6.2	AF frequency response	10 kHz AF signal, otherwise as 6.1	Modulation analyser and AF voltmeter	TP20	0 dB $\pm 1,5$ dB		
6.3	AF frequency response	20 kHz AF signal, otherwise as 6.2	Modulation analyser and AF voltmeter	TP20	-2 dB ± 1 dB		
7	Self-noise	Short-circuit the AF input (TP2, TP1).	Switch off HiDyn expander; modulation analyser and AF voltmeter (CCIR peak).	TP20	≤ -50 dBm		

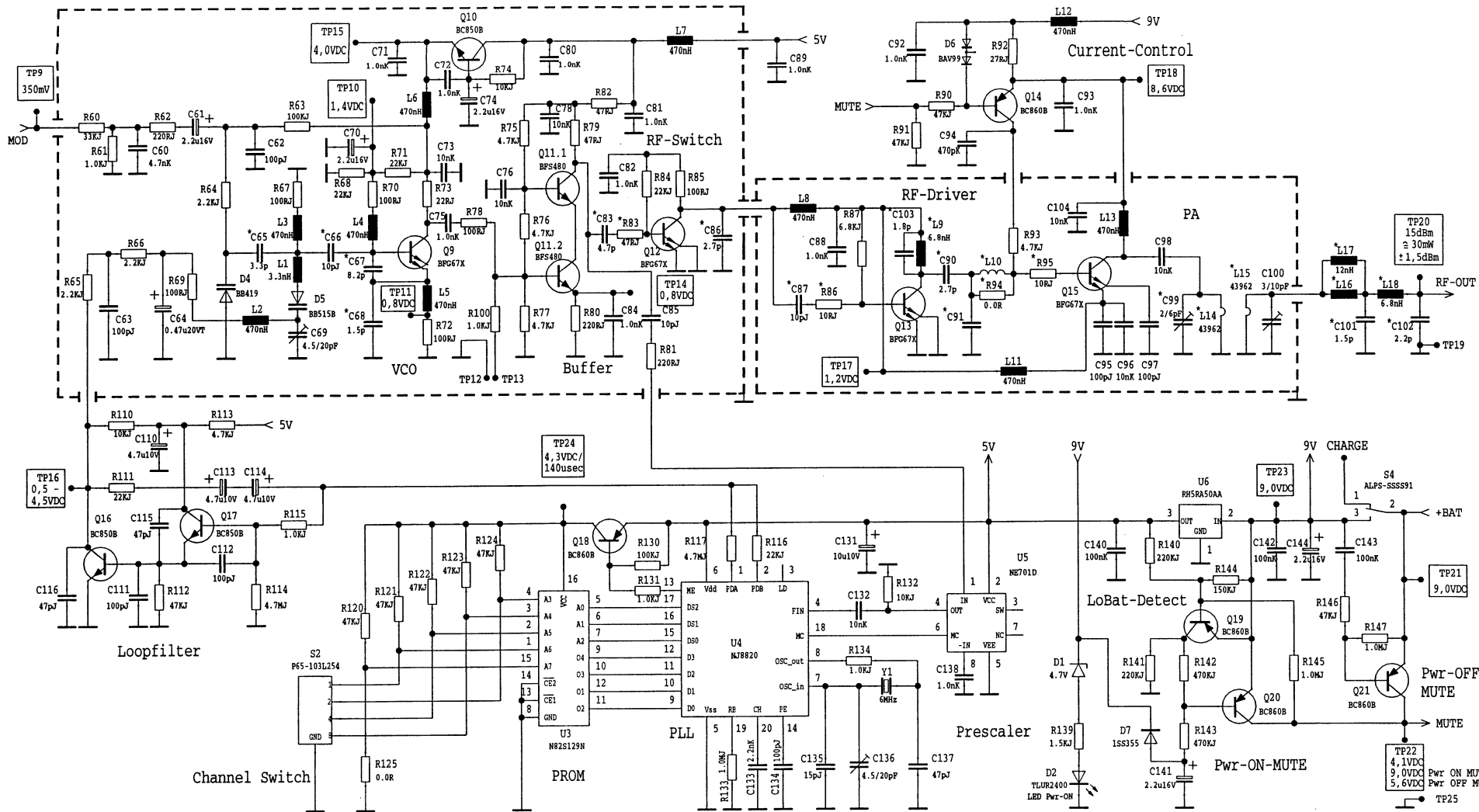


BF 1083-U/SK 1063-U, BLOCKSCHALTBIID
BF 1083-U/SK 1063-U, BLOCK DIAGRAM



PRINTED CIRCUIT BOARD NO.55391
ALTERATIONS OF THESE STANDARD VALUES
FOR OPTIMAL ALIGNMENT ARE POSSIBLE.





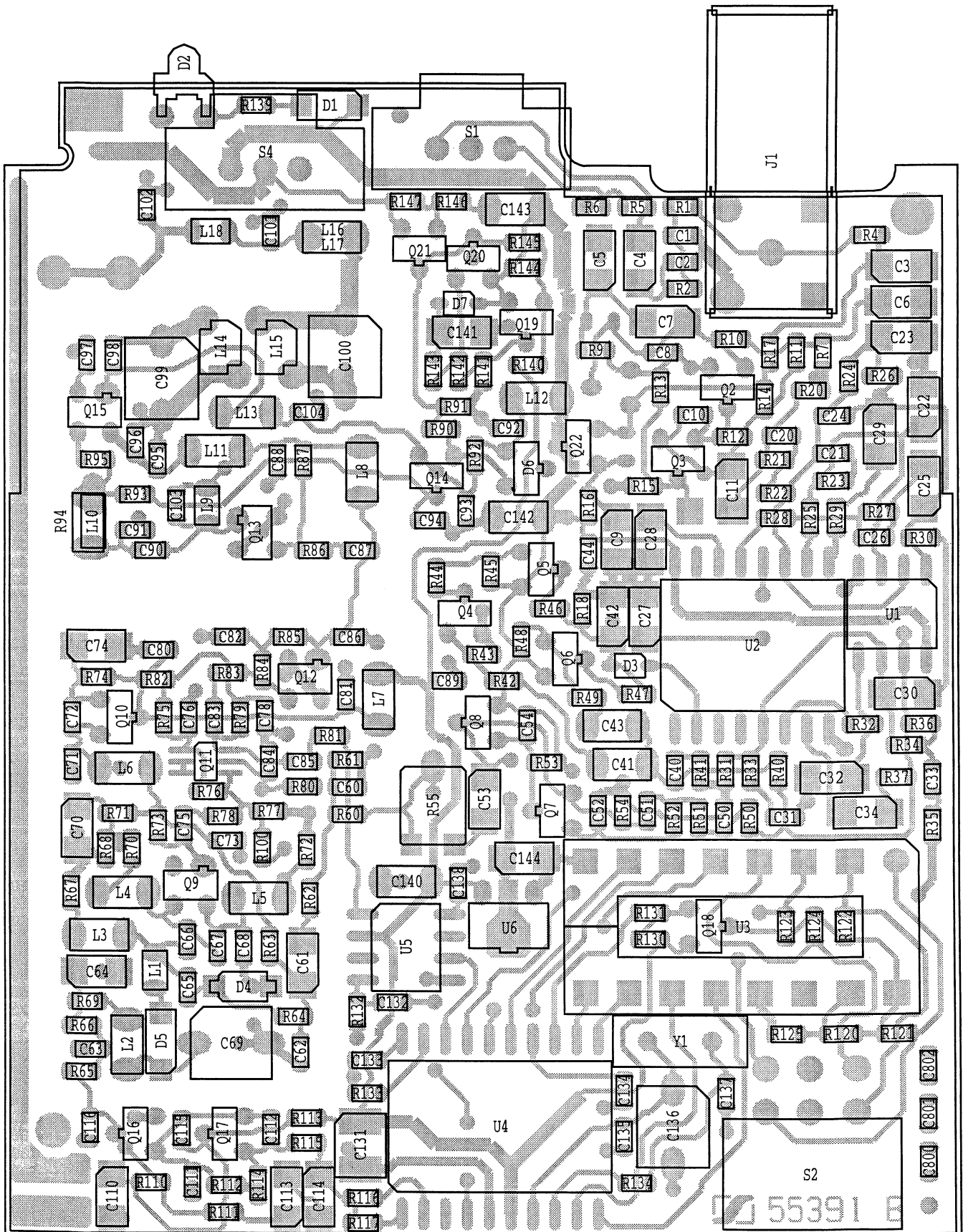
No.	Freq. MHz	VCO			BUFFER			DRIVER					POWER-AMP					Code-Parts											
		L1	C65	C66	C67	C68	C83	R83	C86	C87	R86	C103	L9	C90	C91	L10	R94	R95	C99	L14	L15	L16	L17	C101	L18	C102	C 800	C 801	C 802
1																										*	-	*	
2																										*	*	-	
3	574-702	12nH	5.6p	6.8p	8.2p	2.2p	5.6p	47R	3.9p	12p	22R	2.7p	8.2nH	3.3p	-	-	0R	10R	2/6p	1.5T	1T	15nH	-	2.2p	8.2nH	-	-	*	*
4	678-814	6.8nH	3.9p	8.2p	10p	1.5p	5.6p	47R	3.9p	10p	10R	2.2p	6.8nH	2.7p	-	-	0R	10R	2/6p	1T	1T	-	12nH	1.5p	6.8nH	-	*	-	-
5	798-960	3.3nH	3.3p	10p	8.2p	1.5p	4.7p	47R	2.7p	10p	10R	1.8p	6.8nH	2.7p	-	-	0R	10R	2/6p	1T	1T	-	12nH	1.5p	6.8nH	-	-	-	*

VARIABLES PARTS SHOWN: RANGE 5
 PRINTED CIRCUIT BOARD NO. 55391
 ALTERATIONS OF THESE STANDARD VALUES
 FOR OPTIMAL ALIGNMENT ARE POSSIBLE.

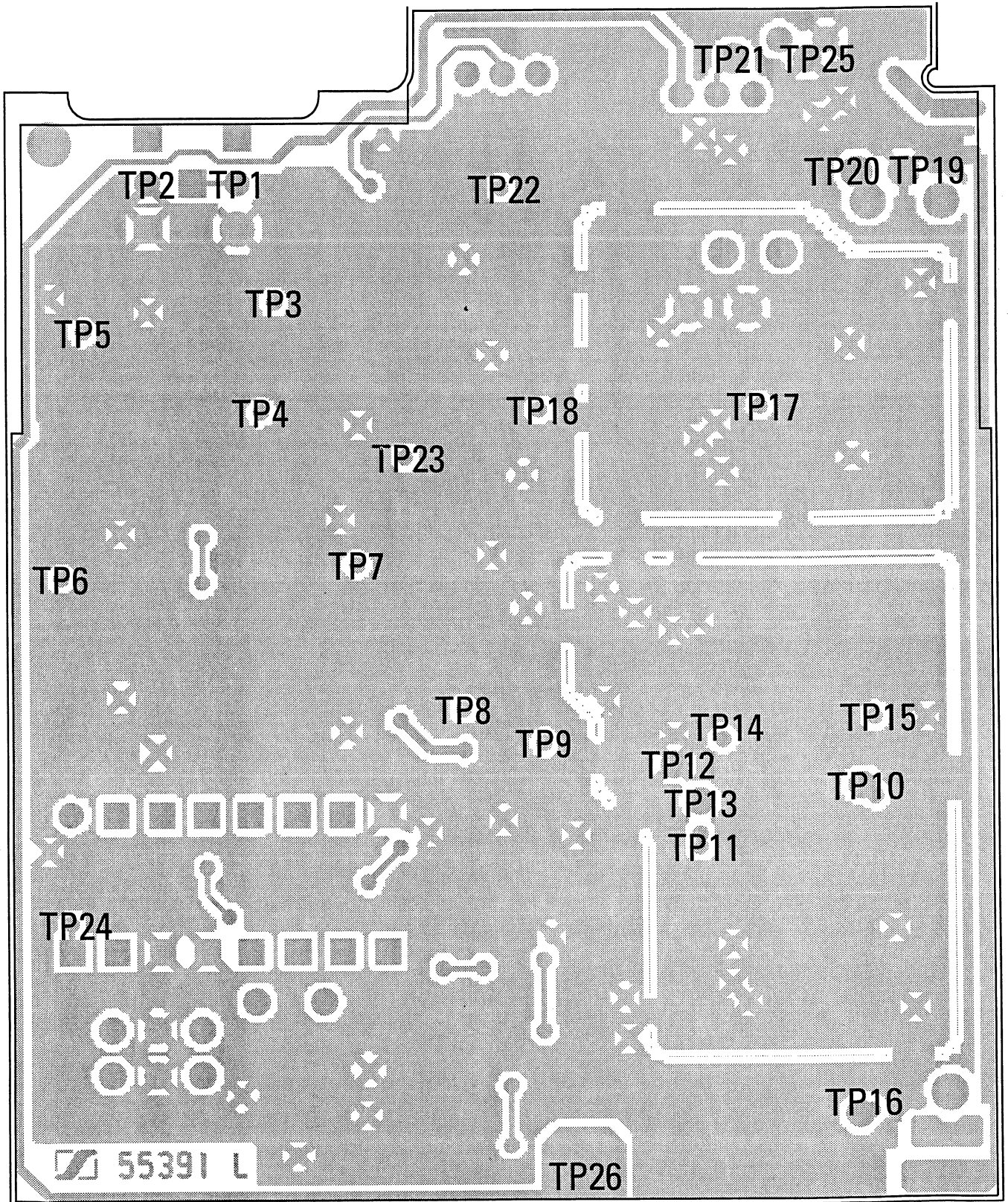
Note: T = Turns

BF 1083-U/SK 1063-U, HF-TEIL, STROMLAUFPLAN
BF 1083-U/SK 1063-U, RF SECTION, CIRCUIT DIAGRAM

BF 1083-U / SK 1063-U
 03 / 96 - 13



BF 1083-U/SK 1063-U, GEDRUCKTE SCHALTUNG, BESTÜCKUNGSSEITE
 BF 1083-U/SK 1063-U, PRINTED CIRCUIT BOARD, COMPONENT SIDE

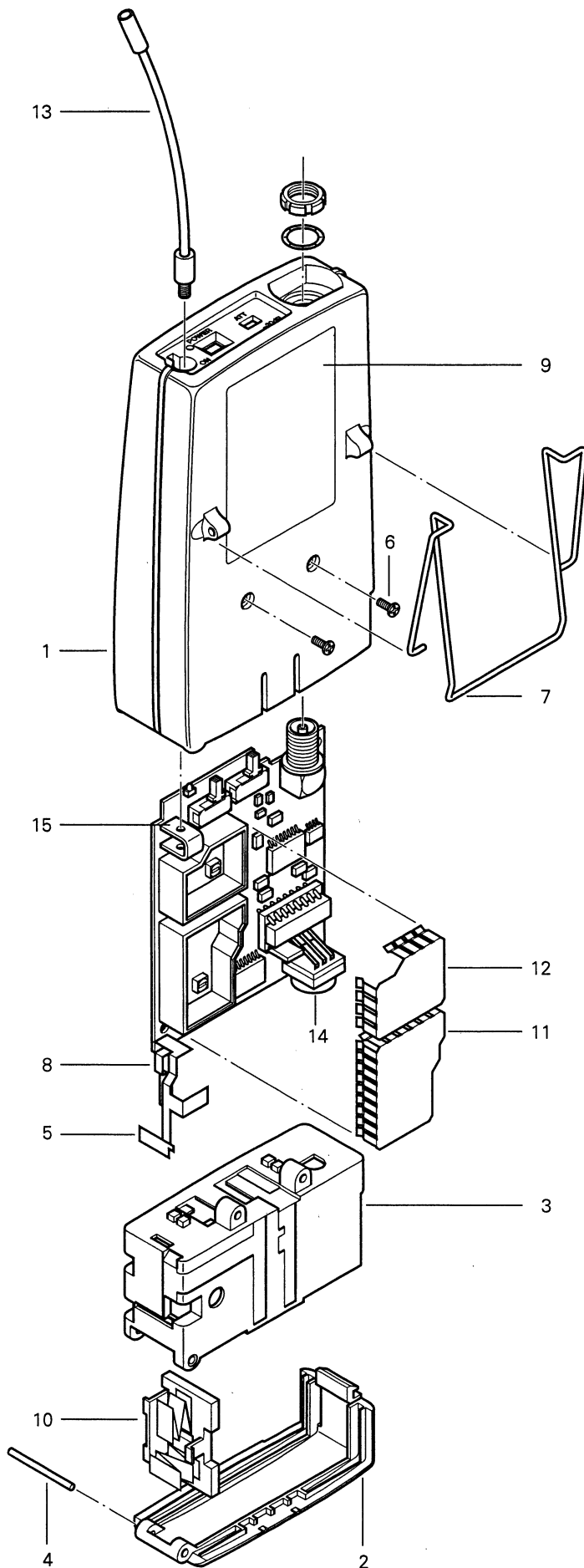


BF 1083-U/SK 1063-U, GEDRUCKTE SCHALTUNG, LÖTSEITE
 BF 1083-U/SK 1063-U, PRINTED CIRCUIT BOARD, SOLDER SIDE

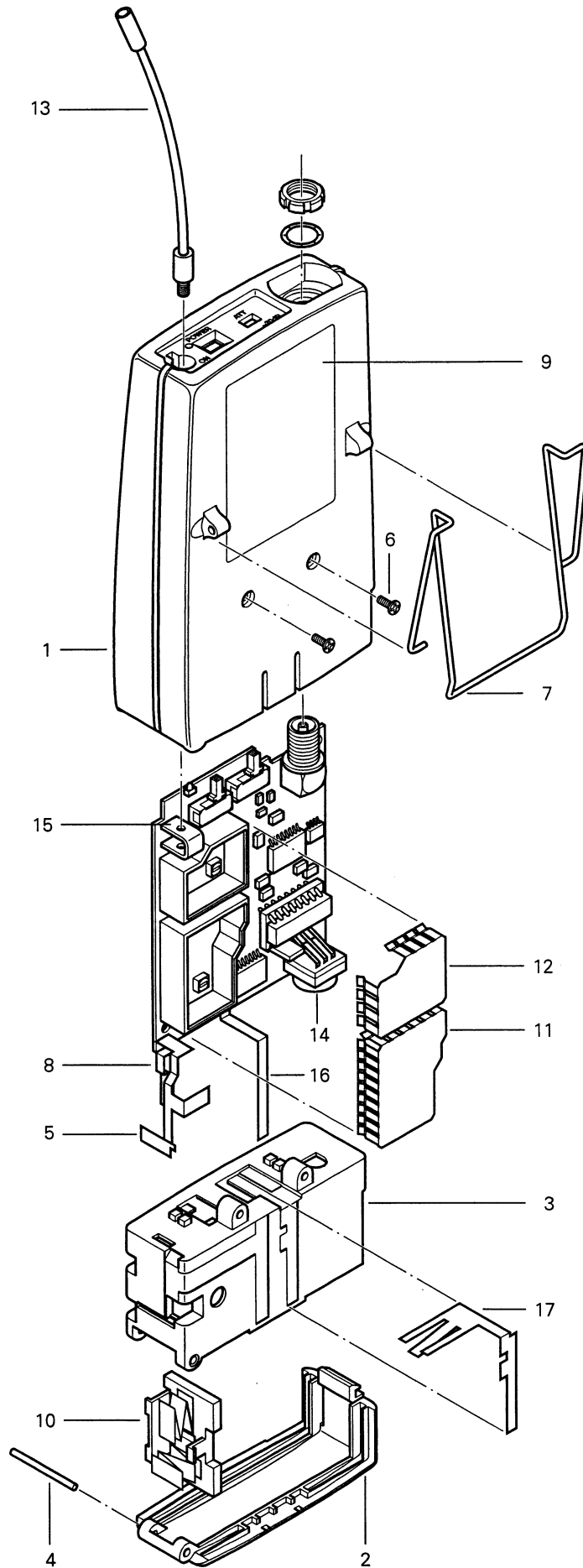
12 EXPLOSIONSZEICHNUNG

12 EXPLODED VIEW

BF 1083-U



SK 1063-U



13 ERSATZTEILE

13 SPARE PARTS

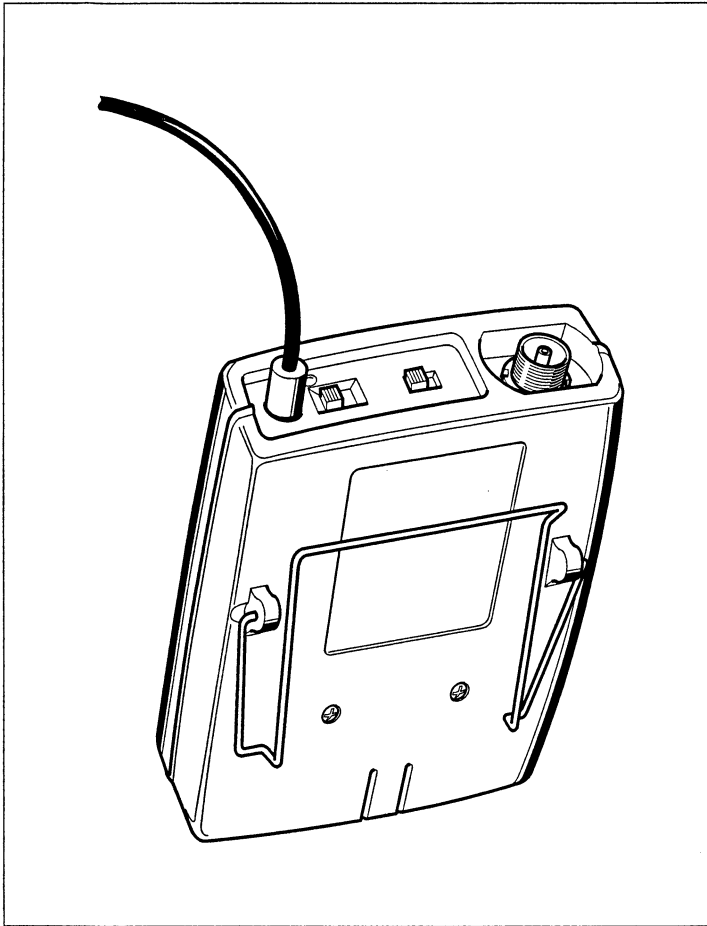
POS	IDENT	BEZEICHNUNG	DESCRIPTION
001	57280	Gehäuse "SE-POWER-ATT"	Housing "SE-POWER-ATT"
002	52828	Batterieklappe	Cover for battery compartment
003	57575	Chassis	Chassis
004	53059	Zylinderstift	Straight pin
005	56240	Kontaktfeder	Contact spring
006	17718	Blechschraube St2,2x6,5 DIN7981 (MOQ:10x)	Sheet metal screw St2.2x6.5 DIN7981 (MOQ:10x)
007	43965	Klammer	Clip
008	52820	Kontaktfeder	Contact spring
009	53438	Schild	Label
010	70526	Kontaktelement	Contact
011	53077	Abschirmdeckel	Shielding cover
012	53076	Abschirmdeckel	Shielding cover
013A	54183	Antenne 560-710MHz 100mm	Antenna 560-710MHz 100mm
013B	54184	Antenne 670-830MHz 85mm	Antenna 670-830MHz 85mm
013C	54185	Antenne 800-960MHz 70mm	Antenna 800-960MHz 70mm
014	56938	Bezeichnungsschild, schwarz	Type plate, black
015	55310	Blech	Sheet metal
016	56076	Kontaktblech (nur für SK1063)	Contact sheet (for SK1063 only)
017	52824	Kontaktfeder (nur für SK1063)	Contact spring (for SK1063 only)
AA001	45640	IC Fassung	IC holder
C001	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C002	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C003	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C004	45086	SMD Kondensator TA-KO 100nF 35V (MOQ:50x)	SMD capacitor TA-KO 100nF 35V (MOQ:50x)
C005	45086	SMD Kondensator TA-KO 100nF 35V (MOQ:50x)	SMD capacitor TA-KO 100nF 35V (MOQ:50x)
C006	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C007	45086	SMD Kondensator TA-KO 100nF 35V (MOQ:50x)	SMD capacitor TA-KO 100nF 35V (MOQ:50x)
C008	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C009	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C010	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C011	45086	SMD Kondensator TA-KO 100nF 35V (MOQ:50x)	SMD capacitor TA-KO 100nF 35V (MOQ:50x)
C020	45199	SMD Kondensator KERKO 4,7nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 4.7nF 50V X7R (MOQ:50x)
C021	45193	SMD Kondensator KERKO 470pF 50V X7R (MOQ:50x)	SMD capacitor KERKO 470pF 50V X7R (MOQ:50x)
C022	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C023	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C024	45174	SMD Kondensator KERKO 10pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 10pF 50V NPO (MOQ:50x)
C025	45050	SMD Kondensator TA-KO 470nF 20V	SMD Capacitor TA-KO 470nF 20V
C026	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C027	45050	SMD Kondensator TA-KO 470nF 20V	SMD Capacitor TA-KO 470nF 20V
C028	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C029	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C030	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C031	45193	SMD Kondensator KERKO 470pF 50V X7R (MOQ:50x)	SMD capacitor KERKO 470pF 50V X7R (MOQ:50x)
C032	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C033	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C034	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C040	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C041	19480	SMD Kondensator KERKO 100nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 100nF 50V X7R (MOQ:50x)
C042	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C043	19480	SMD Kondensator KERKO 100nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 100nF 50V X7R (MOQ:50x)
C044	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C050	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C051	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C052	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C053	45050	SMD Kondensator TA-KO 470nF 20V	SMD Capacitor TA-KO 470nF 20V
C054	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C060	45199	SMD Kondensator KERKO 4,7nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 4.7nF 50V X7R (MOQ:50x)
C061	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C062	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C063	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C064	45050	SMD Kondensator TA-KO 470nF 20V	SMD Capacitor TA-KO 470nF 20V
C065A	45171	SMD Kondensator KERKO 5,6pF 50V NPO (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 5.6pF 50V NPO (MOQ:50x) (574-702MHz)
C065B	45169	SMD Kondensator KERKO 3,9pF 50V NPO (MOQ:50x) (678-814MHz)	SMD capacitor KERKO 3.9pF 50V NPO (MOQ:50x) (678-814MHz)
C065C	45168	SMD Kondensator KERKO 3,3pF 50V NPO (MOQ:50x) (798-960MHz)	SMD capacitor KERKO 3.3pF 50V NPO (MOQ:50x) (798-960MHz)
C066A	45172	SMD Kondensator KERKO 6,8pF 50V NPO (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 6.8pF 50V NPO (MOQ:50x) (574-702MHz)

POS	IDENT	BEZEICHNUNG	DESCRIPTION
C066B	45173	SMD Kondensator KERKO 8,2pF 50V NPO (MOQ:50x) (678-814MHz)	SMD capacitor KERKO 8.2pF 50V NPO (MOQ:50x) (678-814MHz)
C066C	45174	SMD Kondensator KERKO 10pF 50V NPO (MOQ:50x) (798-960MHz)	SMD capacitor KERKO 10pF 50V NPO (MOQ:50x) (798-960MHz)
C067A	45173	SMD Kondensator KERKO 8,2pF 50V NPO (MOQ:50x) (574-702MHz, 798-960MHz)	SMD capacitor KERKO 8.2pF 50V NPO (MOQ:50x) (574-702MHz, 798-960MHz)
C067B	45174	SMD Kondensator KERKO 10pF 50V NPO (MOQ:50x) (678-841MHz)	SMD capacitor KERKO 10pF 50V NPO (MOQ:50x) (678-841MHz)
C068A	45166	SMD Kondensator KERKO 2,2pF 50V NPO (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 2.2pF 50V NPO (MOQ:50x) (574-702MHz)
C068B	45164	SMD Kondensator KERKO 1,5pF 50V NPO (MOQ:50x) (678-960MHz)	SMD capacitor KERKO 1.5pF 50V NPO (MOQ:50x) (678-960MHz)
C069	45363	SMD Trimmkondensator 4,5/20pF (MOQ:50x)	SMD capacitor variable 4.5/20pF (MOQ:50x)
C070	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C071	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C072	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C073	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C074	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C075	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C076	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C078	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C080	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C081	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C082	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C083A	45171	SMD Kondensator KERKO 5,6pF 50V NPO (MOQ:50x) (574-814MHz)	SMD capacitor KERKO 5.6pF 50V NPO (MOQ:50x) (574-814MHz)
C083B	45170	SMD Kondensator KERKO 4,7pF 50V NPO KEFQ (MOQ:50x) (798-960MHz)	SMD capacitor KERKO 4.7pF 50V NPO KEFQ (MOQ:50x) (798-960MHz)
C084	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C085	45174	SMD Kondensator KERKO 10pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 10pF 50V NPO (MOQ:50x)
C086A	45169	SMD Kondensator KERKO 3,9pF 50V NPO (MOQ:50x) (574-814MHz)	SMD capacitor KERKO 3.9pF 50V NPO (MOQ:50x) (574-814MHz)
C086B	45167	SMD Kondensator KERKO 2,7pF 50V NPO (MOQ:50x) (798-960MHz)	SMD capacitor KERKO 2.7pF 50V NPO (MOQ:50x) (798-960MHz)
C087A	45175	SMD Kondensator KERKO 12pF 50V NPO (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 12pF 50V NPO (MOQ:50x) (574-702MHz)
C087B	45174	SMD Kondensator KERKO 10pF 50V NPO (MOQ:50x) (678-960MHz)	SMD capacitor KERKO 10pF 50V NPO (MOQ:50x) (678-960MHz)
C088	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C089	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C090A	45168	SMD Kondensator KERKO 3,3pF 50V NPO (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 3.3pF 50V NPO (MOQ:50x) (574-702MHz)
C090B	45167	SMD Kondensator KERKO 2,7pF 50V NPO (MOQ:50x) (678-960MHz)	SMD capacitor KERKO 2.7pF 50V NPO (MOQ:50x) (678-960MHz)
C092	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C093	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C094	45193	SMD Kondensator KERKO 470pF 50V X7R (MOQ:50x)	SMD capacitor KERKO 470pF 50V X7R (MOQ:50x)
C095	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C096	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C097	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C098	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C099	45364	SMD Trimmkondensator 2,0/6,0pF (MOQ:50x)	SMD capacitor variable 2.0/6.0pF (MOQ:50x)
C100	45365	SMD Trimmkondensator 3,0/10pF (MOQ:50x)	SMD capacitor variable 3.0/10pF (MOQ:50x)
C101A	45166	SMD Kondensator KERKO 2,2pF 50V NPO (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 2.2pF 50V NPO (MOQ:50x) (574-702MHz)
C101B	45164	SMD Kondensator KERKO 1,5pF 50V NPO (MOQ:50x) (678-960MHz)	SMD capacitor KERKO 1.5pF 50V NPO (MOQ:50x) (678-960MHz)
C103A	45167	SMD Kondensator KERKO 2,7pF 50V NPO (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 2.7pF 50V NPO (MOQ:50x) (574-702MHz)
C103B	45166	SMD Kondensator KERKO 2,2pF 50V NPO (MOQ:50x) (678-814MHz)	SMD capacitor KERKO 2.2pF 50V NPO (MOQ:50x) (678-814MHz)
C103C	45165	SMD Kondensator KERKO 1,8pF 50V NPO (MOQ:50x) (798-960MHz)	SMD capacitor KERKO 1.8pF 50V NPO (MOQ:50x) (798-960MHz)
C104	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)
C110	48319	SMD Kondensator TA-KO 4,7uF 10V	SMD capacitor TA-KO 4.7uF 10V
C111	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C112	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C113	48319	SMD Kondensator TA-KO 4,7uF 10V	SMD capacitor TA-KO 4.7uF 10V
C114	48319	SMD Kondensator TA-KO 4,7uF 10V	SMD capacitor TA-KO 4.7uF 10V
C115	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C116	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C131	45010	SMD Kondensator TA-KO 10uF 4V ERO ETPW1	SMD capacitor TA-KO 10uF 4V ERO ETPW1
C132	45201	SMD Kondensator KERKO 10nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 10nF 50V X7R (MOQ:50x)

POS	IDENT	BEZEICHNUNG	DESCRIPTION
C133	45197	SMD Kondensator KERKO 2,2nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 2.2nF 50V X7R (MOQ:50x)
C134	45186	SMD Kondensator KERKO 100pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 100pF 50V NPO (MOQ:50x)
C135	45176	SMD Kondensator KERKO 15pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 15pF 50V NPO (MOQ:50x)
C136	45363	SMD Trimmkondensator 4,5/20pF (MOQ:50x)	SMD capacitor variable 4.5/20pF (MOQ:50x)
C137	45182	SMD Kondensator KERKO 47pF 50V NPO (MOQ:50x)	SMD capacitor KERKO 47pF 50V NPO (MOQ:50x)
C138	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x)
C140	19480	SMD Kondensator KERKO 100nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 100nF 50V X7R (MOQ:50x)
C141	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C142	19480	SMD Kondensator KERKO 100nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 100nF 50V X7R (MOQ:50x)
C143	19480	SMD Kondensator KERKO 100nF 50V X7R (MOQ:50x)	SMD capacitor KERKO 100nF 50V X7R (MOQ:50x)
C144	45043	SMD Kondensator TA-KO 2,2uF 16V IEC 384,3	SMD capacitor TA-KO 2.2uF 16V IEC 384,3
C800	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x) (678-814MHz)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x) (678-814MHz)
C801	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x) (574-702MHz)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x) (574-702MHz)
C802	45195	SMD Kondensator KERKO 1nF 50V X7R (MOQ:50x) (574-702MHz, 798-960MHz)	SMD capacitor KERKO 1nF 50V X7R (MOQ:50x) (574-702MHz, 798-960MHz)
D001	46588	SMD Z-Diode Mini-MELF ZMM4,7-5	SMD Z diode Nini-MELF ZMM4.7-5
D002	17550	LED	LED
D003	45444	SMD Diode 1SS355	SMD diode 1SS355
D004	45304	SMD Varicap BB419 SOD123	SMD Varicap BB419 SOT123
D005	41275	SMD Varicap BB515B SOD123 SUP8	SMD Varicap BB515B SOD123 SUP8
D006	32642	SMD Doppeldiode BAV99 SOT23	SMD diodes (two) BAV99 SOT23
D007	45444	SMD Diode 1SS355	SMD diode 1SS355
J001	45613	Buchse, Coax/Lemo	Socket, coax/lemo
L001A	45381	SMD Spule 12nH (574-702MHz)	SMD coil 12nH (574-702MHz)
L001B	45398	SMD Spule 6,8nH (678-814MHz)	SMD Spule 6.8nH (378-814MHz)
L001C	45397	SMD Spule 3,3nH (798-960MHz)	SMD coil 3.3nH (798-960MHz)
L002	37542	SMD Spule 470nH	SMD coil 470nH
L003	37542	SMD Spule 470nH	SMD coil 470nH
L004	37542	SMD Spule 470nH	SMD coil 470nH
L005	37542	SMD Spule 470nH	SMD coil 470nH
L006	37542	SMD Spule 470nH	SMD coil 470nH
L007	37542	SMD Spule 470nH	SMD coil 470nH
L008	37542	SMD Spule 470nH	SMD coil 470nH
L009A	45380	SMD Spule 8,2nH (574-702MHz)	SMD coil 8.2nH (574-702MHz)
L009B	45398	SMD Spule 6,8nH (678-960MHz)	SMD Spule 6.8nH (678-960MHz)
L011	37542	SMD Spule 470nH	SMD coil 470nH
L012	37542	SMD Spule 470nH	SMD coil 470nH
L013	37542	SMD Spule 470nH	SMD coil 470nH
L014A	43962	HF-Spule	RF coil
L014B	49241	HF Spule	RF coil
L015	49241	HF Spule	RF coil
L016	45382	SMD Spule 15nH (574-702MHz)	SMD coil 15nH (574-702MHz)
L017	41274	SMD Spule 12nH SUP8 (678-960MHz)	SMD coil 12nH SUP8 (678-960MHz)
L018A	45380	SMD Spule 8,2nH (574-702MHz)	SMD coil 8.2nH (574-702MHz)
L018B	45398	SMD Spule 6,8nH (678-960MHz)	SMD Spule 6.8nH (678-960MHz)
Q002	32467	SMD Transistor BC850B SOT23	SMD transistor BC850B SOT23
Q003	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q004	32467	SMD Transistor BC850B SOT23	SMD transistor BC850B SOT23
Q005	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q006	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q007	32467	SMD Transistor BC850B SOT23	SMD transistor BC850B SOT23
Q008	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q009	43663	SMD Transistor BFG67/X SOT143	SMD transistor BFG67/X SOT143
Q010	32467	SMD Transistor BC850B SOT23	SMD transistor BC850B SOT23
Q011	45496	NPN Transistor BFS480 SOT363 SUP8	NPN transistor BFS480 SOT363 SUP8
Q012	43663	SMD Transistor BFG67/X SOT143	SMD transistor BFG67/X SOT143
Q013	43663	SMD Transistor BFG67/X SOT143	SMD transistor BFG67/X SOT143
Q014	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q015	43663	SMD Transistor BFG67/X SOT143	SMD transistor BFG67/X SOT143
Q016	32467	SMD Transistor BC850B SOT23	SMD transistor BC850B SOT23
Q017	32467	SMD Transistor BC850B SOT23	SMD transistor BC850B SOT23
Q018	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23

POS	IDENT	BEZEICHNUNG	DESCRIPTION
Q019	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q020	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q021	32468	SMD Transistor BC860B SOT23	SMD transistor BC860B SOT23
Q022	32467	SMD Transistor BC850B SOT23	SMD transistor BC850B SOT23
R001	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R002	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R004	45137	SMD Widerstand 6k8 5% 0603 (MOQ:50x)	SMD resistor 6k8 5% 0603 (MOQ:50x)
R005	45140	SMD Widerstand 22k 5% 0603 (MOQ:50x)	SMD resistor 22k 5% 0603 (MOQ:50x)
R006	45135	SMD Widerstand 3k3 5% 0603 (MOQ:50x)	SMD resistor 3k3 5% 0603 (MOQ:50x)
R007	45141	SMD Widerstand 33k 5% 0603 (MOQ:50x)	SMD resistor 33k 5% 0603 (MOQ:50x)
R009	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R010	45143	SMD Widerstand 68k 5% 0603 (MOQ:50x)	SMD resistor 68k 5% 0603 (MOQ:50x)
R011	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R012	45137	SMD Widerstand 6k8 5% 0603 (MOQ:50x)	SMD resistor 6k8 5% 0603 (MOQ:50x)
R013	45295	SMD Widerstand 0R 0603 (MOQ:50x)	SMD resistor 0R 0603 (MOQ:50x)
R014	45135	SMD Widerstand 3k3 5% 0603 (MOQ:50x)	SMD resistor 3k3 5% 0603 (MOQ:50x)
R015	45130	SMD Widerstand 470R 5% 0603 (MOQ:50x)	SMD resistor 470R 5% 0603 (MOQ:50x)
R016	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R017	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R018	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R020	45148	SMD Widerstand 470k 5% 0603 (MOQ:50x)	SMD resistor 470k 5% 0603 (MOQ:50x)
R021	45143	SMD Widerstand 68k 5% 0603 (MOQ:50x)	SMD resistor 68k 5% 0603 (MOQ:50x)
R022	45139	SMD Widerstand 15k 5% 0603 (MOQ:50x)	SMD resistor 15k 5% 0603 (MOQ:50x)
R023	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R024	45146	SMD Widerstand 220k 5% 0603 (MOQ:50x)	SMD resistor 220k 5% 0603 (MOQ:50x)
R025	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R026	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R027	45141	SMD Widerstand 33k 5% 0603 (MOQ:50x)	SMD resistor 33k 5% 0603 (MOQ:50x)
R028	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R029	45139	SMD Widerstand 15k 5% 0603 (MOQ:50x)	SMD resistor 15k 5% 0603 (MOQ:50x)
R030	45140	SMD Widerstand 22k 5% 0603 (MOQ:50x)	SMD resistor 22k 5% 0603 (MOQ:50x)
R031	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R032	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R033	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R034	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R035	45129	SMD Widerstand 330R 5% 0603 (MOQ:50x)	SMD resistor 330R 5% 0603 (MOQ:50x)
R036	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R037	45139	SMD Widerstand 15k 5% 0603 (MOQ:50x)	SMD resistor 15k 5% 0603 (MOQ:50x)
R040	45141	SMD Widerstand 33k 5% 0603 (MOQ:50x)	SMD resistor 33k 5% 0603 (MOQ:50x)
R041	45143	SMD Widerstand 68k 5% 0603 (MOQ:50x)	SMD resistor 68k 5% 0603 (MOQ:50x)
R042	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R043	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R044	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R045	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R046	45135	SMD Widerstand 3k3 5% 0603 (MOQ:50x)	SMD resistor 3k3 5% 0603 (MOQ:50x)
R047	45135	SMD Widerstand 3k3 5% 0603 (MOQ:50x)	SMD resistor 3k3 5% 0603 (MOQ:50x)
R048	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R049	45221	SMD Widerstand 82k 5% 0603 (MOQ:50x)	SMD resistor 82k 5% 0603 (MOQ:50x)
R050	45136	SMD Widerstand 4k7 5% 0603 (MOQ:50x)	SMD resistor 4k7 5% 0603 (MOQ:50x)
R051	45137	SMD Widerstand 6k8 5% 0603 (MOQ:50x)	SMD resistor 6k8 5% 0603 (MOQ:50x)
R052	45141	SMD Widerstand 33k 5% 0603 (MOQ:50x)	SMD resistor 33k 5% 0603 (MOQ:50x)
R053	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R054	45136	SMD Widerstand 4k7 5% 0603 (MOQ:50x)	SMD resistor 4k7 5% 0603 (MOQ:50x)
R055	45003	SMD Trimmwiderstand 50k	SMD resistor, variable 50k
R060	45141	SMD Widerstand 33k 5% 0603 (MOQ:50x)	SMD resistor 33k 5% 0603 (MOQ:50x)
R061	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R062	45128	SMD Widerstand 220R 5% 0603 (MOQ:50x)	SMD resistor 220R 5% 0603 (MOQ:50x)
R063	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R064	45134	SMD Widerstand 2k2 5% 0603 (MOQ:50x)	SMD resistor 2k2 5% 0603 (MOQ:50x)
R065	45134	SMD Widerstand 2k2 5% 0603 (MOQ:50x)	SMD resistor 2k2 5% 0603 (MOQ:50x)
R066	45134	SMD Widerstand 2k2 5% 0603 (MOQ:50x)	SMD resistor 2k2 5% 0603 (MOQ:50x)
R067	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R068	45140	SMD Widerstand 22k 5% 0603 (MOQ:50x)	SMD resistor 22k 5% 0603 (MOQ:50x)
R069	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R070	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R071	45140	SMD Widerstand 22k 5% 0603 (MOQ:50x)	SMD resistor 22k 5% 0603 (MOQ:50x)
R072	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R073	45122	SMD Widerstand 22R 5% 0603 (MOQ:50x)	SMD resistor 22R 5% 0603 (MOQ:50x)
R074	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R075	45136	SMD Widerstand 4k7 5% 0603 (MOQ:50x)	SMD resistor 4k7 5% 0603 (MOQ:50x)
R076	45136	SMD Widerstand 4k7 5% 0603 (MOQ:50x)	SMD resistor 4k7 5% 0603 (MOQ:50x)
R077	45136	SMD Widerstand 4k7 5% 0603 (MOQ:50x)	SMD resistor 4k7 5% 0603 (MOQ:50x)
R078	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)

POS	IDENT	BEZEICHNUNG	DESCRIPTION
R079	45124	SMD Widerstand 47R 5% 0603 (MOQ:50x)	SMD resistor 47R 5% 0603 (MOQ:50x)
R080	45128	SMD Widerstand 220R 5% 0603 (MOQ:50x)	SMD resistor 220R 5% 0603 (MOQ:50x)
R081	45128	SMD Widerstand 220R 5% 0603 (MOQ:50x)	SMD resistor 220R 5% 0603 (MOQ:50x)
R082	45124	SMD Widerstand 47R 5% 0603 (MOQ:50x)	SMD resistor 47R 5% 0603 (MOQ:50x)
R083	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R084	45140	SMD Widerstand 22k 5% 0603 (MOQ:50x)	SMD resistor 22k 5% 0603 (MOQ:50x)
R085	45126	SMD Widerstand 100R 5% 0603 (MOQ:50x)	SMD resistor 100R 5% 0603 (MOQ:50x)
R086A	45122	SMD Widerstand 22R 5% 0603 (MOQ:50x) (574-702MHz)	SMD resistor 22R 5% 0603 (MOQ:50x) (574-702MHz)
R086B	45120	SMD Widerstand 10R 5% 0603 (MOQ:50x) (678-960MHz)	SMD resistor 10R 5% 0603 (MOQ:50x) (678-960MHz)
R087	45137	SMD Widerstand 6k8 5% 0603 (MOQ:50x)	SMD resistor 6k8 5% 0603 (MOQ:50x)
R090	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R091	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R092	45283	SMD Widerstand 27R 5% 0603 (MOQ:50x)	SMD resistor 27R 5% 0603 (MOQ:50x)
R093	45136	SMD Widerstand 4k7 5% 0603 (MOQ:50x)	SMD resistor 4k7 5% 0603 (MOQ:50x)
R094	32561	SMD Widerstand 0R 1206 (MOQ:50x)	SMD resistor 0R 1206 (MOQ:50x)
R095	45120	SMD Widerstand 10R 5% 0603 (MOQ:50x)	SMD resistor 10R 5% 0603 (MOQ:50x)
R100	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R110	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R111	45140	SMD Widerstand 22k 5% 0603 (MOQ:50x)	SMD resistor 22k 5% 0603 (MOQ:50x)
R112	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R113	45136	SMD Widerstand 4k7 5% 0603 (MOQ:50x)	SMD resistor 4k7 5% 0603 (MOQ:50x)
R114	45152	SMD Widerstand 4,75M 10% 0603 (MOQ:50x)	SMD resistor 4.75M 10% 0603 (MOQ:50x)
R115	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R116	45140	SMD Widerstand 22k 5% 0603 (MOQ:50x)	SMD resistor 22k 5% 0603 (MOQ:50x)
R117	45152	SMD Widerstand 4,75M 10% 0603 (MOQ:50x)	SMD resistor 4.75M 10% 0603 (MOQ:50x)
R120	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R121	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R122	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R123	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R124	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R125	45295	SMD Widerstand 0R 0603 (MOQ:50x)	SMD resistor 0R 0603 (MOQ:50x)
R130	45144	SMD Widerstand 100k 5% 0603 (MOQ:50x)	SMD resistor 100k 5% 0603 (MOQ:50x)
R131	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R132	45138	SMD Widerstand 10k 5% 0603 (MOQ:50x)	SMD resistor 10k 5% 0603 (MOQ:50x)
R133	45150	SMD Widerstand 1M 5% 0603 (MOQ:50x)	SMD resistor 1M 5% 0603 (MOQ:50x)
R134	45132	SMD Widerstand 1k 5% 0603 (MOQ:50x)	SMD resistor 1k 5% 0603 (MOQ:50x)
R139	45133	SMD Widerstand 3k3 5% 0603 (MOQ:50x)	SMD resistor 3k3 5% 0603 (MOQ:50x)
R140	45146	SMD Widerstand 220k 5% 0603 (MOQ:50x)	SMD resistor 220k 5% 0603 (MOQ:50x)
R141	45146	SMD Widerstand 220k 5% 0603 (MOQ:50x)	SMD resistor 220k 5% 0603 (MOQ:50x)
R142	45148	SMD Widerstand 470k 5% 0603 (MOQ:50x)	SMD resistor 470k 5% 0603 (MOQ:50x)
R143	45148	SMD Widerstand 470k 5% 0603 (MOQ:50x)	SMD resistor 470k 5% 0603 (MOQ:50x)
R144	45145	SMD Widerstand 150k 5% 0603 (MOQ:50x)	SMD resistor 150k 5% 0603 (MOQ:50x)
R145	45150	SMD Widerstand 1M 5% 0603 (MOQ:50x)	SMD resistor 1M 5% 0603 (MOQ:50x)
R146	45142	SMD Widerstand 47k 5% 0603 (MOQ:50x)	SMD resistor 47k 5% 0603 (MOQ:50x)
R147	45150	SMD Widerstand 1M 5% 0603 (MOQ:50x)	SMD resistor 1M 5% 0603 (MOQ:50x)
S001	45230	Schiebeschalter	Slide switch
S002	45370	Codierschalter	Code switch
S004	45230	Schiebeschalter	Slide switch
U001	41277	SMD IC MC33078D SO8 SUP8	SMD IC MC33078D SO8 SUP8
U002	45093	SMD IC NE572D SOL16	SMD IC NE572D SOL16
U003	40095	IC PROM 1Kx4 N82S129N (unprogrammiert!)	IC PROM 1Kx4 N82S129N (not programmed!)
U004	45034	SMD IC CMOS NJ8820 MP20	SMD IC CMOS NJ8820 MP20
U005	45508	SMD IC NE701D SO8	SMD IC NE701D SO8
U006	43685	SMD IC RH5RA50AA.T2 SOT89	SMD IC RH5RA50AA.T2 SOT89
Y001	45375	Quarz 6MHz	Crystal 6MHz
ZZ010	50522	Koffer	Case
ZZ011	44941	Schaumzuschnitt 225x164x5	Foam insert 225x164x5
ZZ012	53609	Schaumform	Foam insert
ZZ013	50524	Faltschachtel	Folding box
ZZ020	58851	Bedienungsanleitung SK1063-U	Instructions for use SK1063-U
ZZ021	57369	Bedienungsanleitung BF1083	Instructions for use BF1083



BF 1083-U

SK 1063-U

Leiterplattennummer 55392
PCB number 55392

TECHNISCHE ÄNDERUNG

Der Taschensender BF 1081-U / SK 1063-U wird in Zukunft in einer fertigungstechnisch modifizierten Version ausgeliefert. Bei der neuen Version sind die Empfangsbereiche erweitert. Die neue Leiterplatte mit der Leiterplattennummer 55392 fließt ohne Seriennummernsprung in die Fertigung ein.

Heften Sie diese Service-Information zu der entsprechenden Service-Anleitung:

- BF 1083-U / SK 1063-U (Ersatzteilnummer 70527)

INHALT:

- Stromlaufplan NF-Teil
- Stromlaufplan HF-Teil
- Gedruckte Schaltung (Bestückungsseite)
- Gedruckte Schaltung (Lötseite)

TECHNICAL MODIFICATION

The BF 1083-U / SK 1063-U body-pack UHF transmitter will in future be slightly modified: It will contain new frequency ranges and a new printed circuit board, PCB no. 55392. This modification will be implemented without changing the series number.

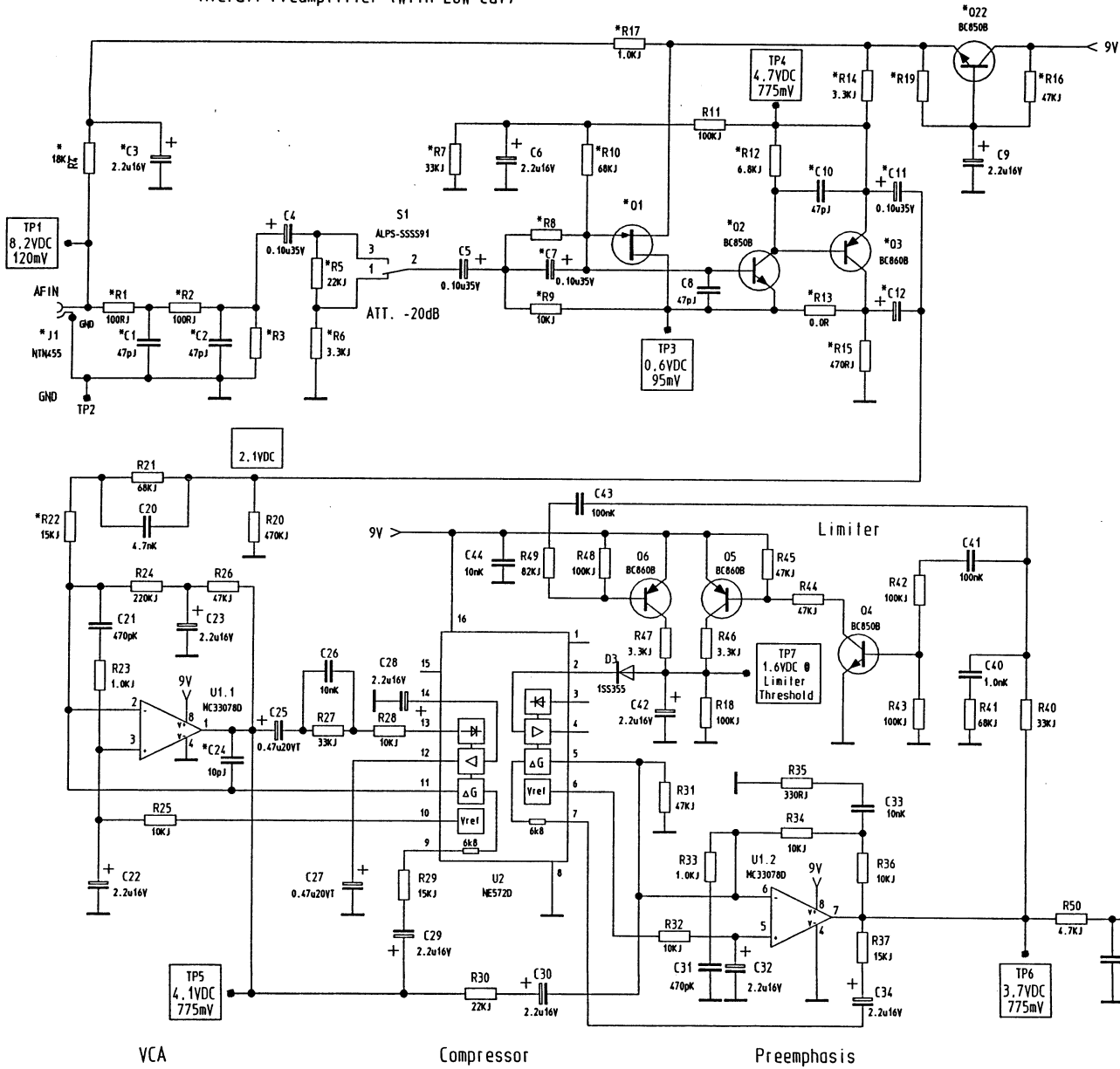
Please attach this Service-Information close to your Service manual:

- BF 1083-U / SK 1063-U (Spare part no. 70527)

CONTENTS:

- Circuit diagram AF section
- Circuit diagram RF section
- Printed Circuit Board (Component Side)
- Printed Circuit Board (Solder Side)

Mic/Git-Preamplifier (with Low-Cut)

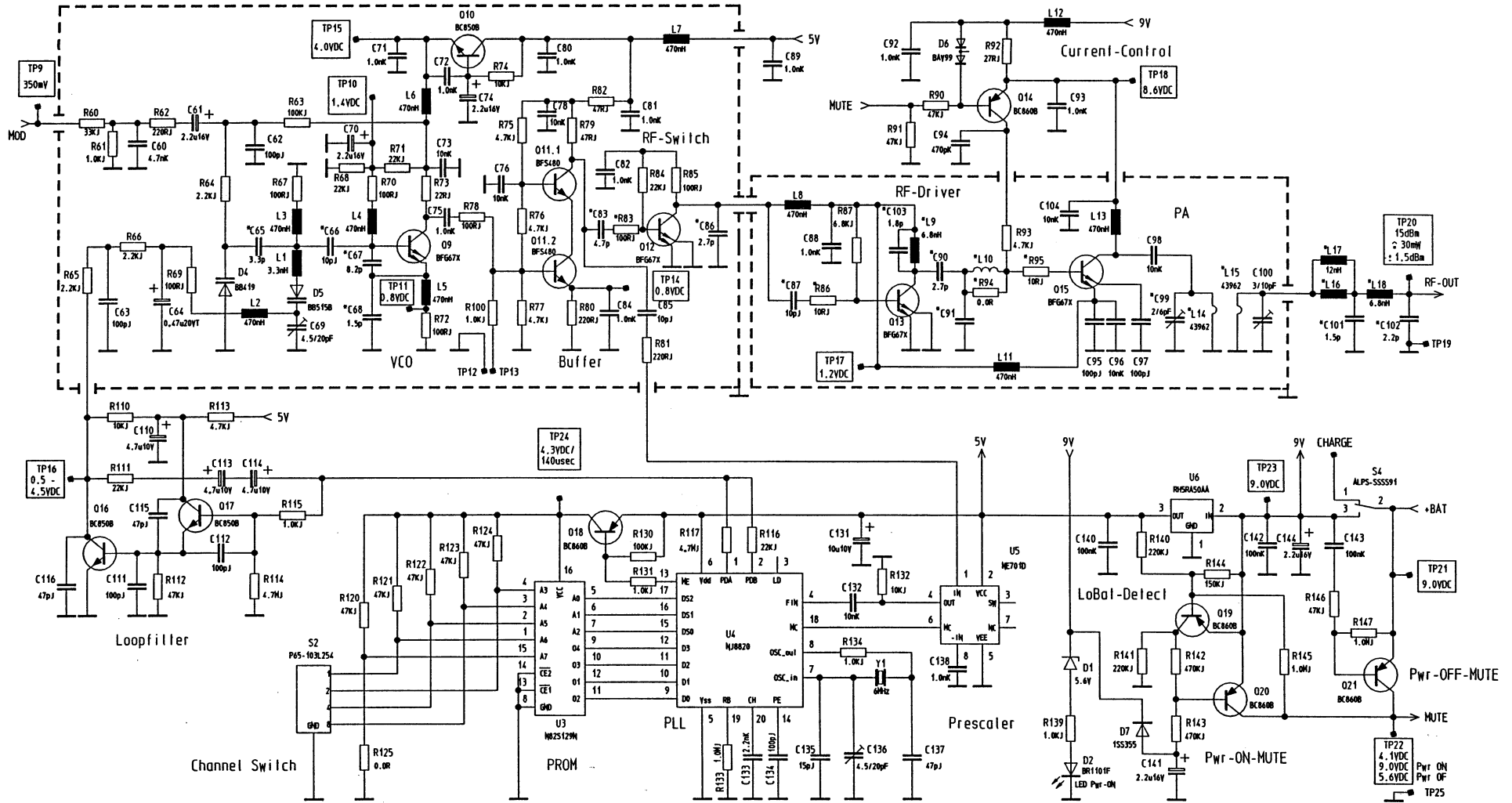


* COMPONENTS			
DEVICE	MIC-AMP	DEVICE	MIC-AMP
R1	100R	C1	47pF
R2	100R	C2	47pF
		C3	2.2uF
R4	18k	C7	100nF
R5	22k	C10	47pF
R6	3.3k	C11	100nF
R7	33k	C12	n.m.
R8	n.m.	C24	10pF
R9	10k		
R10	68k	Q1	n.m.
R12	6.8k	Q2	BC850B
R13	0R	Q3	BC860B
R14	3.3k	Q22	BC850B
R15	470R		
R16	47k	J1	LEMO NTN
R17	1k		n.m. = not mounted
R19	n.m.		
R22	15k		
Code Par 1s:		Level for 40kHz FM deviation: f=1kHz (0dBu = 775mV)	
C/R800/802	1n	TP1	-16 dBu
Performance:		TP3	+0.6VDC
Sensitivity for 40kHz FM (Deviation θ f=1kHz)		TP4	+4.7VDC
	120mV		0 dBu
S1	ATT -20dB	TP5	0 dBu
LOWCUT	90Hz -3dB	TP6	0 dBu
ROLL OFF	18dB/OCT.	TP8	0 dBu
Rin	5k		

VARIABLES PARTS SHOWN: MIC-AMP
PRINTED CIRCUIT BOARD NO. 55391

ALTERATIONS OF THESE STANDARD VALUES
FOR OPTIMAL ALIGNMENT ARE POSSIBLE.

BF 1083-U/SK 1063-U, STROMLAUFPLAN, NF-TEIL
BF 1083-U/SK 1063-U, CIRCUIT DIAGRAM, AF SECTION



For < 10mW Application is R86 and R95 set to 15R. (only for Ranges 4 and 5)

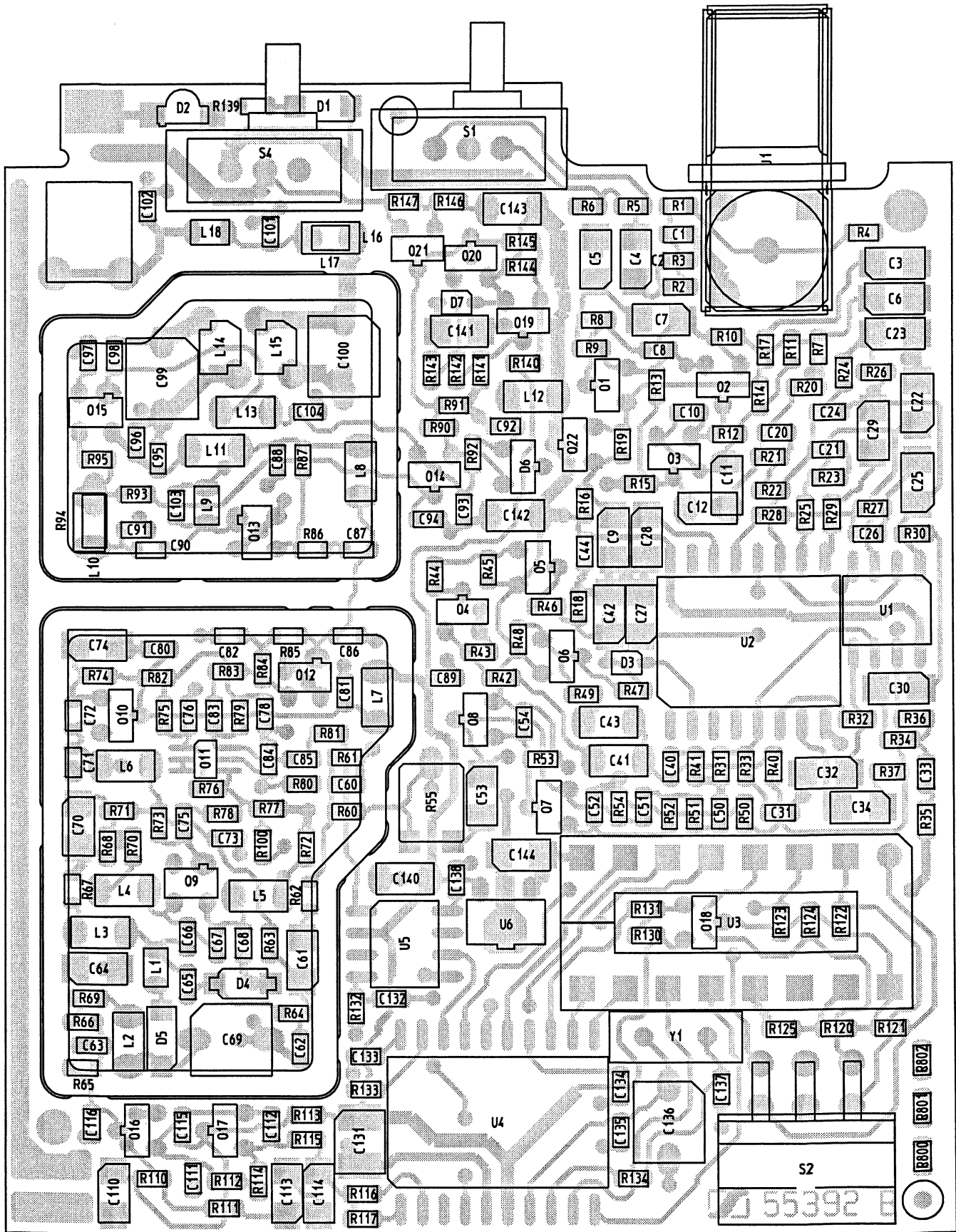
No.	Freq. MHz	VCO			BUFFER			DRIVER			POWER-AMP				Code-Parts																
		L1	C65	C66	C67	C68	C83	R83	C86	C87	R86	C103	L9	C90	C91	L10	R94	R95	C99	L14	L15	L16	L17	C101	L18	C102	C/R 800	C/R 801	C/R 802		
1	430-494	18nH	10p	6.8p	15p	3.3p	6.8p	100R	4.7p	12p	22R	3.3p	8.2nH	3.9p	-	-	OR	15R	3/10p	1.5T	2T	18nH	-	2.7p	12nH	3.9p	-	-	-	-	-
2	470-598	15nH	8.2p	6.8p	10p	2.7p	6.8p	100R	3.9p	12p	22R	3.3p	8.2nH	3.9p	-	-	OR	15R	3/10p	1.5T	2T	18nH	-	2.2p	8.2nH	3.3p	-	-	-	-	-
3	574-702	12nH	5.6p	6.8p	8.2p	2.2p	5.6p	100R	3.9p	12p	22R	2.7p	8.2nH	3.3p	-	-	OR	10R	2/6p	1.5T	1T	15nH	-	2.2p	8.2nH	-	-	-	-	-	-
4	678-814	6.8nH	3.9p	8.2p	10p	1.5p	5.6p	47R	3.9p	10p	10R	2.2p	6.8nH	2.7p	-	-	OR	10R	2/6p	1T	1T	-	-	12nH	1.5p	6.8nH	-	-	-	-	-
5	798-960	3.3nH	3.3p	10p	8.2p	1.5p	4.7p	47R	2.7p	10p	10R	1.8p	6.8nH	2.7p	-	-	OR	10R	2/6p	1T	1T	-	-	12nH	1.5p	6.8nH	-	-	-	-	-

ALTERATIONS OF THESE STANDARD VALUES FOR OPTIMAL ALIGNMENT ARE POSSIBLE.

Note: 1 = Turns

NOTICE 1 C800/C802 (1rF) DESCRIBES MICROPHONE VERSIO

**BF 1083-U/SK 1063-U, STROMLAUFPLAN, HF-TEIL
BF 1083-U/SK 1063-U CIRCUIT DIAGRAM, RF SECTION**



BF 1083-U/SK 1063-U, GEDRUCKTE SCHALTUNG, BESTÜCKUNGSSEITE
 BF 1083-U/SK 1063-U, PRINTED CIRCUIT BOARD, COMPONENT SIDE