



Customer Service Bulletin SD800002 Upgrade to SLP45200 Filter PCB

Continual Improvement is a cornerstone of the Southern Avionics Company Quality Management System. We issue Customer Service Bulletins to inform our valued customers of product upgrades and/or helpful technical information that may enhance the reliability of your equipment.

We have recently made improvements to our SLP45200 Filter PCB assembly to eliminate potential failure modes and/or increase long-term performance and reliability of your SE125 Transmitter systems.

Application: This bulletin applies to **SLP45200 Filter PCB, Revision K or earlier**. This applies to SE transmitters purchased before 29 April, 2013. SLP45200 is used in the SLE45200 and SLE46200 Filter Modules in SE series Transmitters.

The SLE45200 module is used in transmitter model SE125 IP66 Single with part numbers SLF33300 and SLF33001, and in transmitter model SE125 IP66 Dual with part numbers SLF33400, SLF33401, and SLF33402.

The SLE46200 module is used in transmitter models SE125, SE250, and SE500 Rack Mount Dual with part numbers SLF33010, SLF33030, and SLF34002.

Identifying Transmitter part numbers listed above:

Locate the serial tag on your transmitter enclosure. The prefix "SLF" plus the first five (5) characters of your serial number indicate the SAC Transmitter Part Number as detailed below. The specific transmitters affected are referenced by the last four (4) characters in your serial number.

For example: A Serial Number of 33010XX0L0024 represents a SAC Transmitter part number of SLF33010.



SLP45200 Filter PCB update details: We have recently made improvements to our SLP45200 Filter PCB assembly to eliminate potential failure modes and/or increase long-term performance and reliability of your SE125 Transmitter systems. The filter PCB is now configured with the operating range divided into 4 bands instead of 3 bands. We found at certain frequencies, a power increase may result in the failure of SLP45000 SPA PCB, if the ATU is detuned. This is most likely to occur, if your equipment is operating in the 275-295 KHz or 430-450 KHz range. To prevent possible failures, we are instructing our customers to reconfigure their filter PCBs from 3 bands to 4 bands, using the following jumper configuration:

Old Configuration

FREQUENCY BAND (KHz)			
	190-300	300-450	450-650
JP1	A,B,C D,E	A,C,D	D
JP2	OPEN	B	A
JP3	A,B,C,D	A,B	B
JP4	A,B,C,D	A,B,D	D
JP5	OPEN	B	A
JP6	D	A,C	B
JP7	C,D	A,B,C	C
JP8	OPEN	B	A
JP9	A,B,C,D	B,D	C,D
JP10	C,D,E	B,D	A,E

New Configuration

FREQUENCY BAND (KHz)				
	190-270	270-400	400-500	500-650
JP1	A,B,C D,E	A,C,D	B,C	D
JP2	OPEN	B	A	A
JP3	A,B,C,D	A,B	B,C	B
JP4	A,B,C,D	A,B,D	A,D	D
JP5	OPEN	B	A	A
JP6	D	A,C	C	B
JP7	C,D	A,B,C	A,C	C
JP8	OPEN	B	A	A
JP9	A,B,C,D	B,D	D	C,D
JP10	C,D,E	B,D	A,E	A,E

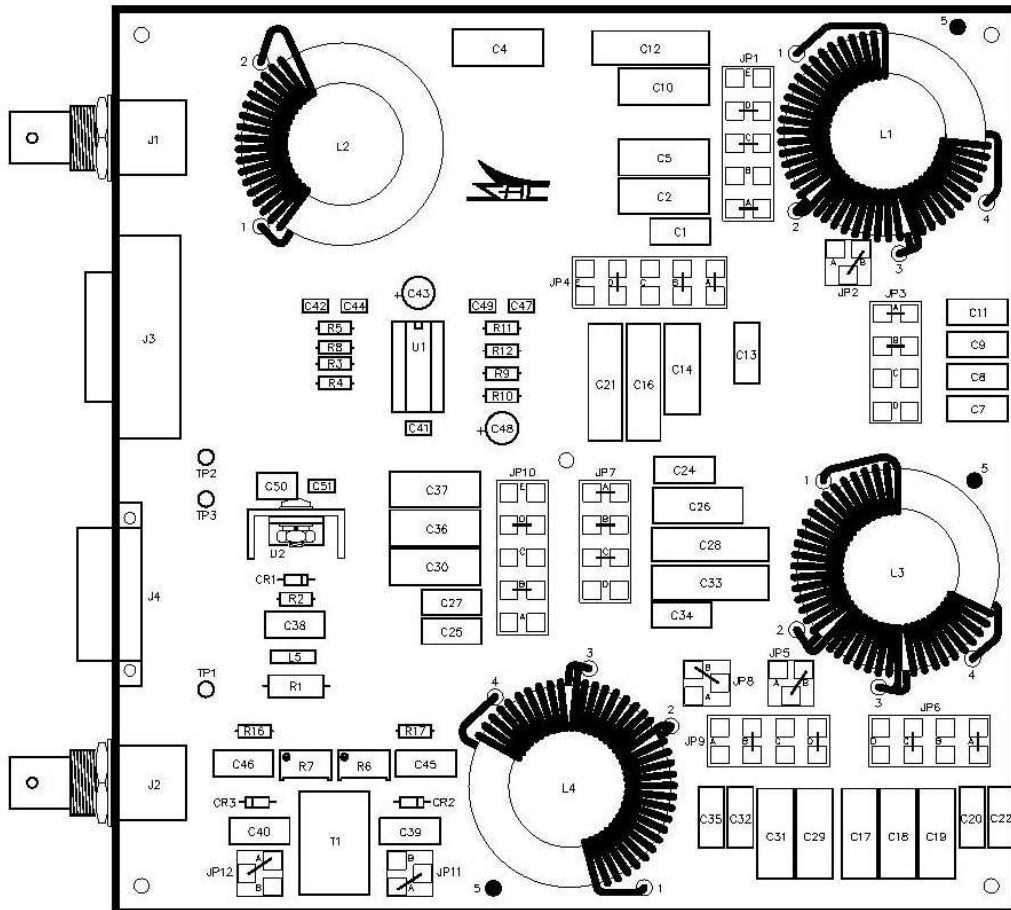
We are also in the process of introducing a new version of the filter PCB to make it much easier to change bands. Instead of soldered jumpers, the new design utilizes four (4) individual plugs arranged to configure the four (4) bands.

The following diagrams show the board layout with an example of the jumper positions for the 270-400 kHz configuration. Please consult the New Configuration chart above for jumper configuration of your desired band of operation, and see documents below for your system's diagram and schematic. Please insert this bulletin, including documents below, in your manual. Thank you for choosing Southern Avionics Company for your NDB needs. We appreciate your business.

This Customer Service Bulletin and others may be found at <http://www.southernavionics.com/customer-service-bulletins/>.



SLP45200 Diagram and Schematics:



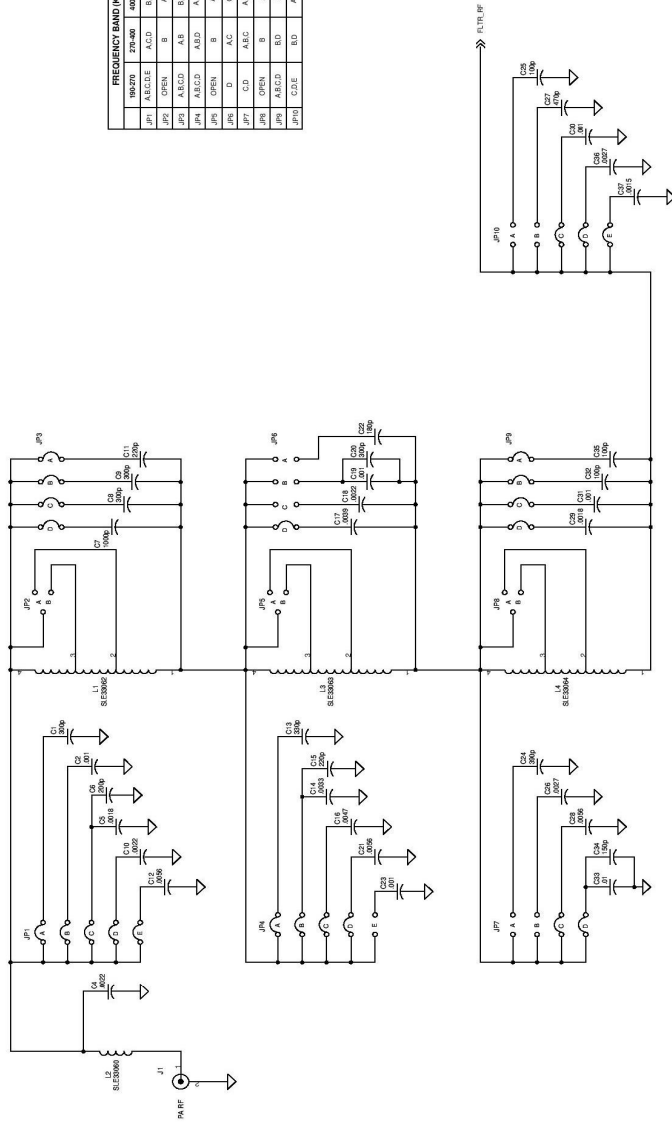
- NOTES: 1. THIS DWG NO. SDP45200 REV. E.
 2. TITLE: FILTER / BRIDGE PCB DIAGRAM STANDARD BAND.
 3. SCHEMATIC DWG NO. SEP45200.
 4. PART NO. SLP45200.

SOUTHERN AVIONICS COMPANY

MANUFACTURERS OF LOW FREQUENCY RADIOBEACONS AND ASSOCIATED PRODUCTS

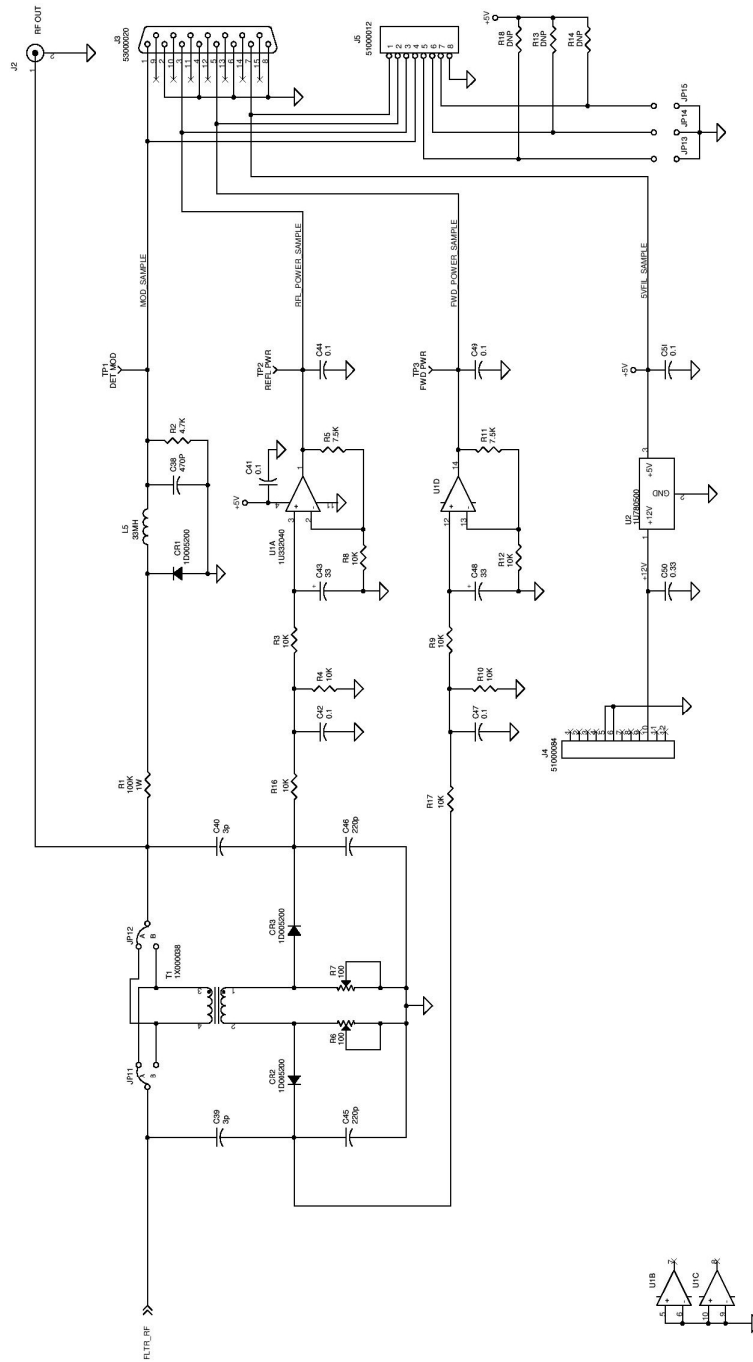


FREQUENCY BAND (MHz)		
1	2	3
JP1	AB, CD, E	AB, CD, E
JP2	AB, CD, E	AB, CD, E
JP3	AB, CD, E	AB, CD, E
JP4	AB, CD, E	AB, CD, E
JP5	AB, CD, E	AB, CD, E
JP6	AB, CD, E	AB, CD, E
JP7	AB, CD, E	AB, CD, E
JP8	AB, CD, E	AB, CD, E
JP9	AB, CD, E	AB, CD, E
JP10	AB, CD, E	AB, CD, E



- NOTES:
 1. TITLE REFERENCE FOR STANDARD BAND SCHEMATIC.
 2. ADDRESS FOR ANY, UNLESS NOTED.
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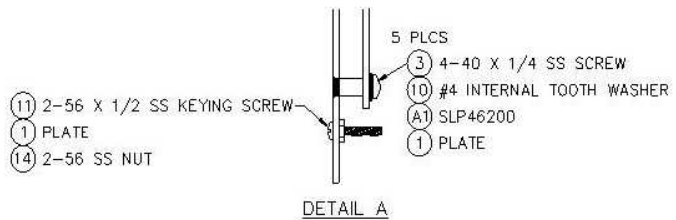
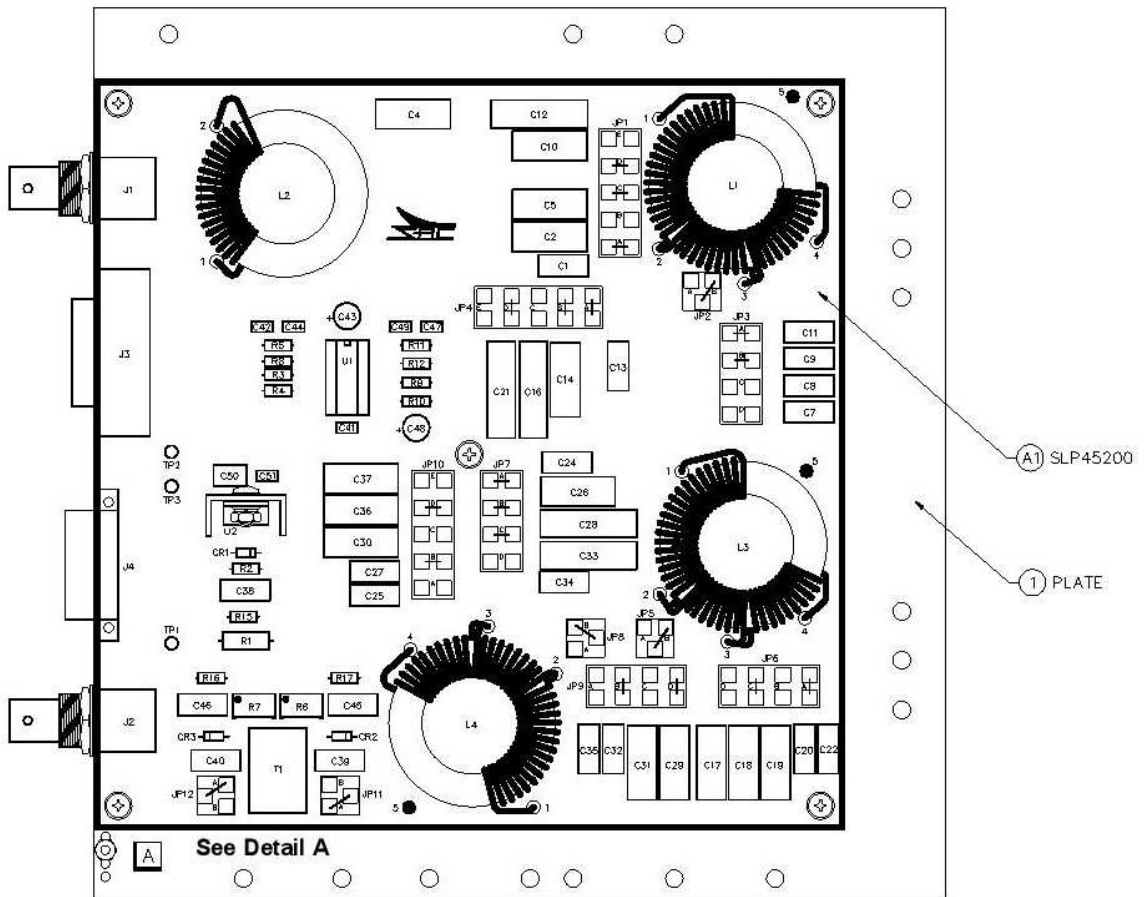
SEP45200 - FILTER BRIDGE SCHEMATIC (1 OF 2)



SEP45200 - FILTER BRIDGE SCHEMATIC (2 OF 2)



SLE46200 Diagram and Schematics:

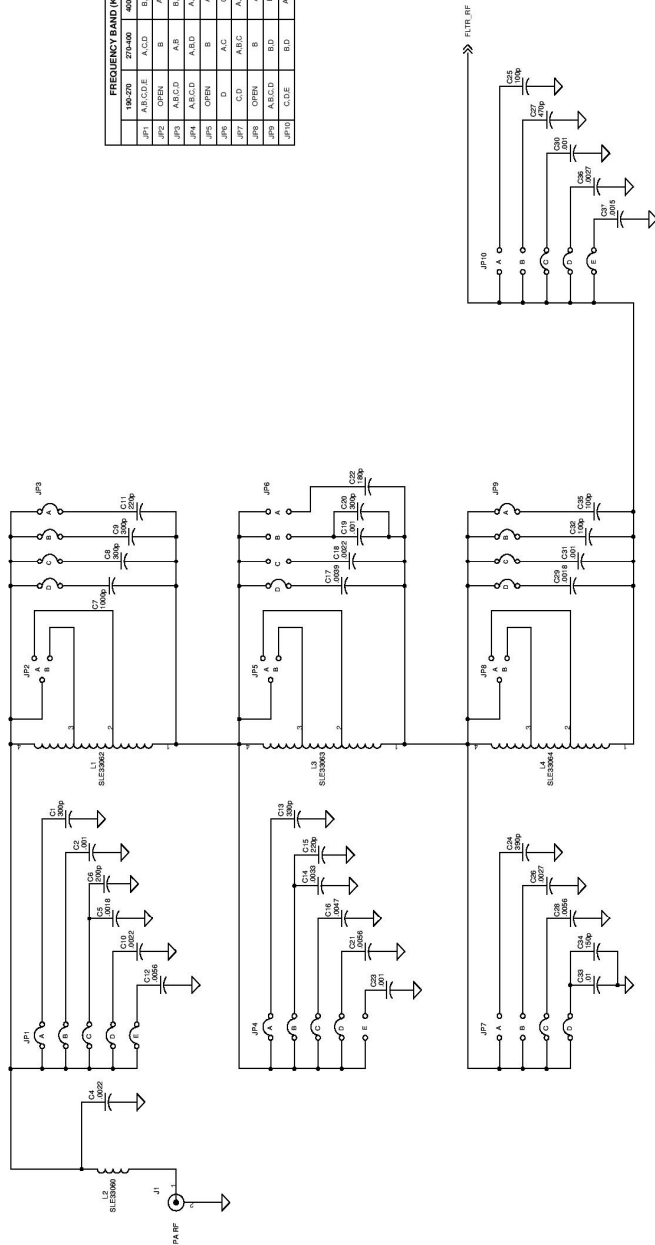


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FREQUENCY BAND (KHZ)	
190-270	A,C,D
270-400	B,C
400-500	D
500-650	A
JP1	A,B,C,D,E
JP2	OPEN
JP3	B
JP4	A,B
JP5	B,C
JP6	B
JP7	A,B,C,D
JP8	A,B
JP9	A,C
JP10	C,D
JP11	A,B
JP12	OPEN
JP13	B
JP14	A,B,C,D
JP15	B,D
JP16	D
JP17	A,C
JP18	A,C
JP19	A,C
JP20	B
JP21	A
JP22	OPEN
JP23	B
JP24	A,B,C,D
JP25	B,D
JP26	D
JP27	A,E
JP28	A,E

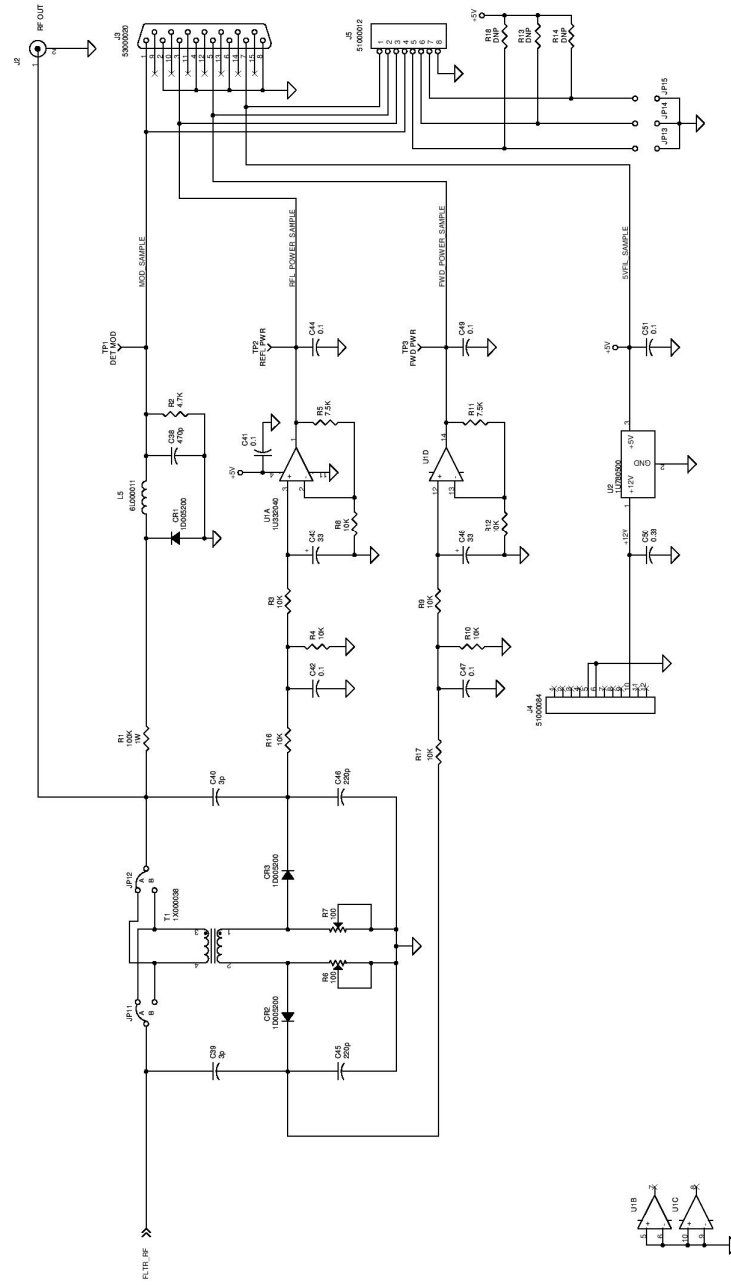


- NOTES:
1. THIS DRAWING IS SEMI-FACTORY.
 2. TITLE AND PART NUMBER (P/N) IS STANDARD BAND SCHEMATIC.
 3. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED.
 4. ALL RESISTORS ARE 1% UNLESS NOTED.
 5. CAPACITORS ARE IN PFD UNLESS NOTED.
 6. C1, C5, C7, C13, C21, C23, C25, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C162, C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C188, C189, C190, C191, C192, C193, C194, C195, C196, C197, C198, C199, 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 7. SOLDER MASK CAPS (S.M.C.) ARE NOT USED FOR STANDARD BAND.
 8. SOLDER MASK CAPS (S.M.C.) ARE USED FOR STANDARD BAND.
 9. S.M.C. IS INDICATED BY "S.M.C." IN THE PART NUMBER.
 10. ">" INDICATES OFF-PAGE CONNECTION.

SEP46200 - FILTER BRIDGE SCHEMATIC (1 OF 2)

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MANUFACTURERS OF LOW FREQUENCY RADIOBEACONS AND ASSOCIATED PRODUCTS



SEP46200 - FILTER BRIDGE SCHEMATIC (2 OF 2)