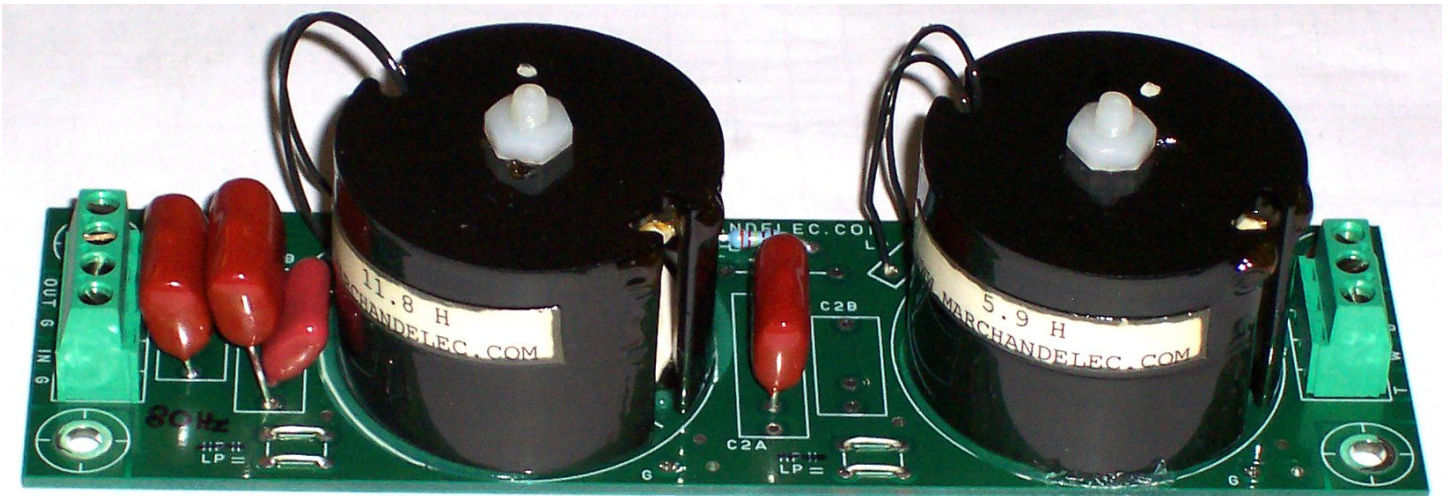


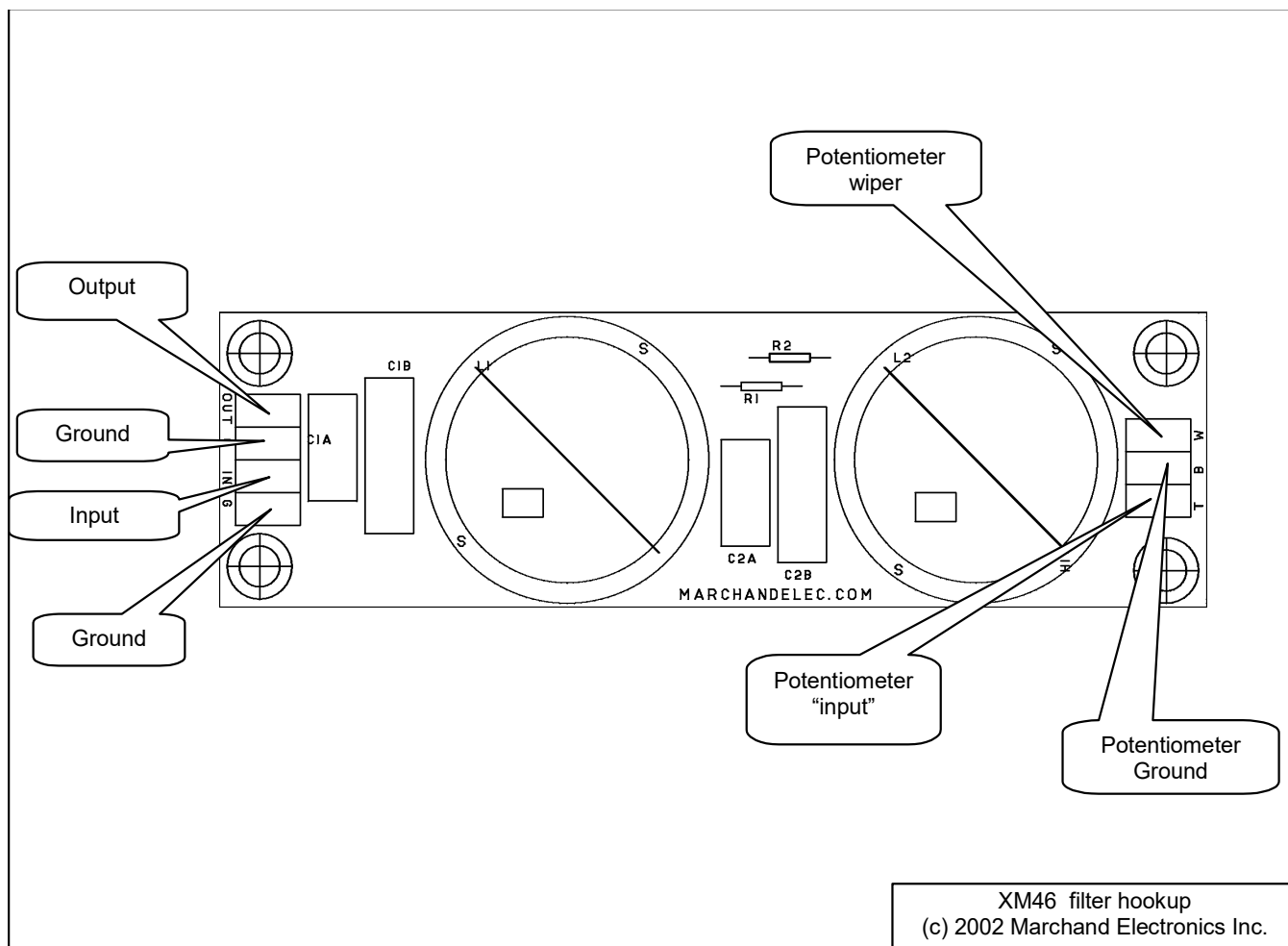


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XM46 Passive 2-way crossover





High Pass Component values for 250Hz constant voltage filter, impedance = 1350 Ohm		
C1	.28uF	.22uF + .039uF 2% Polypropylene Capacitor
C2	.14uF	.10uF + .039uF 2% Polypropylene Capacitor
L1	1 H	Potcore inductor 1%
L2	2H	Potcore inductor 1%
R1	2.00 K	1% metal film resistor
R2	4.22K	1% metal film resistor

Low Pass Component values for 250Hz constant voltage filter, impedance = 1350 Ohm		
C1	.4uF	.22uF + 0.1uF + .082uF 2% Polypropylene Capacitor
C2	.2uF	.10uF + .10uF 2% Polypropylene Capacitor
L1	1.4H	Potcore inductor 1%
L2	2.8h	Potcore inductor 1%
R1	2.00 K	1% metal film resistor
R2	4.22K	1% metal film resistor

Custom design worksheet

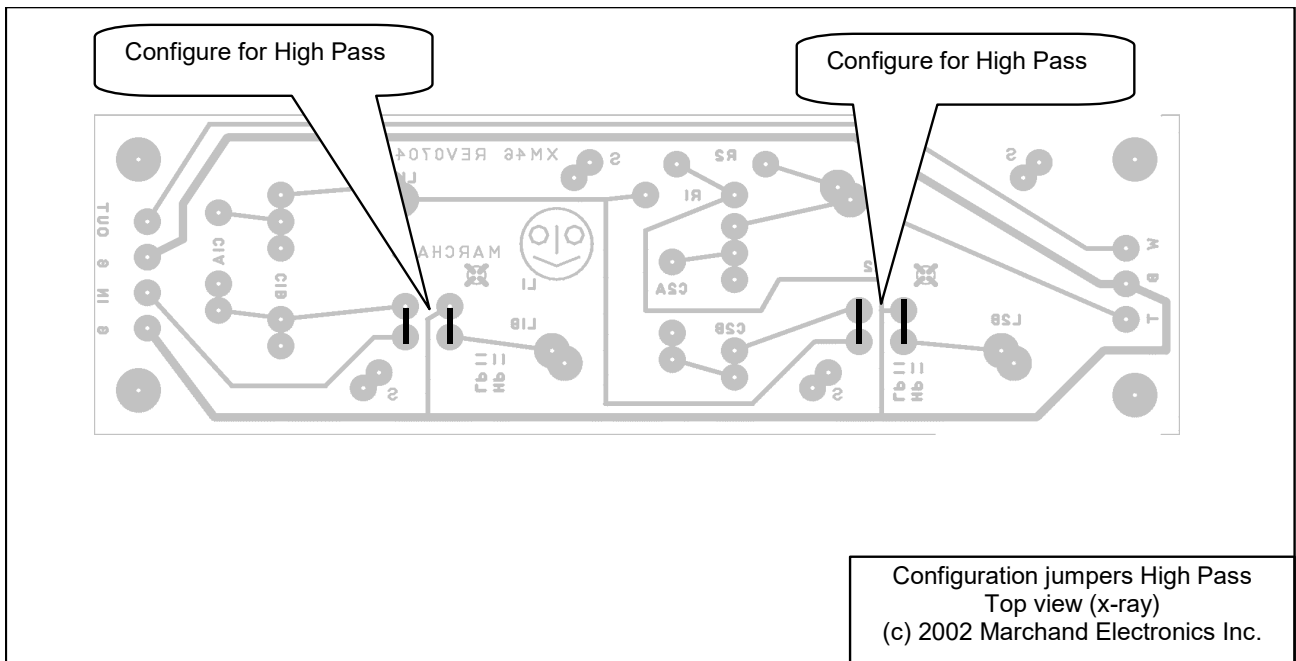
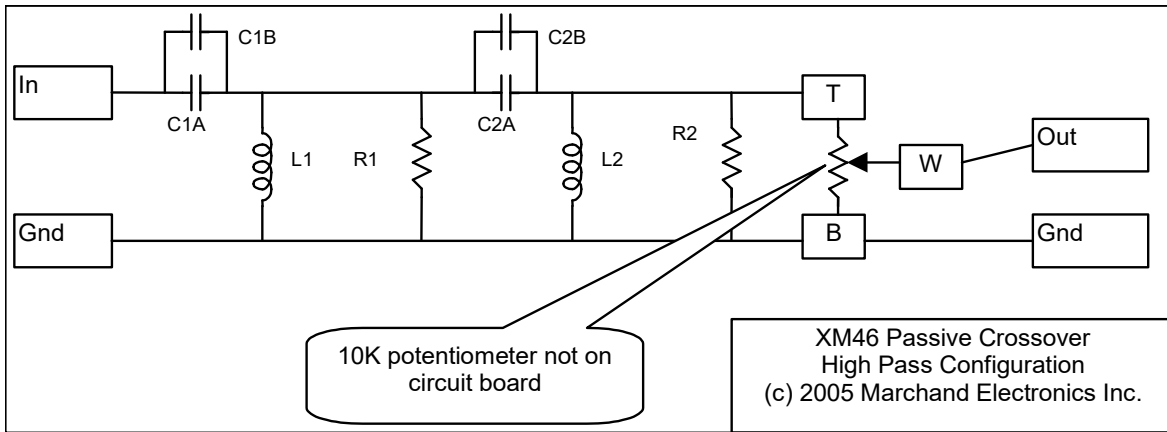
High Pass Component values for Hz filter

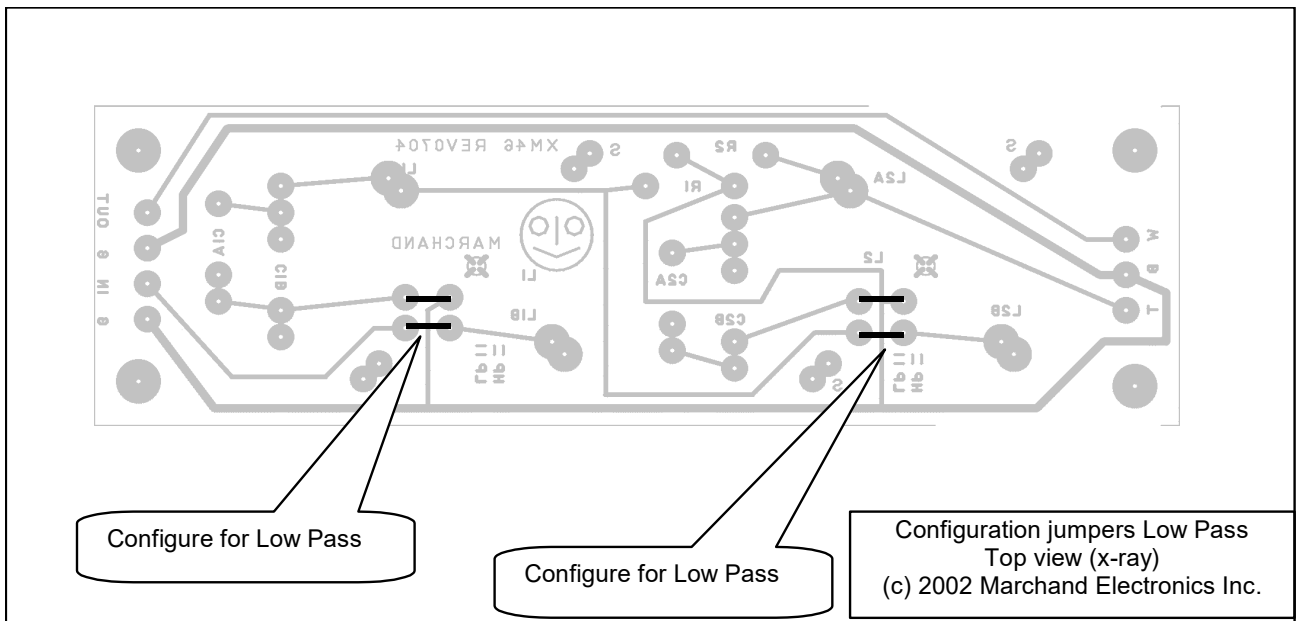
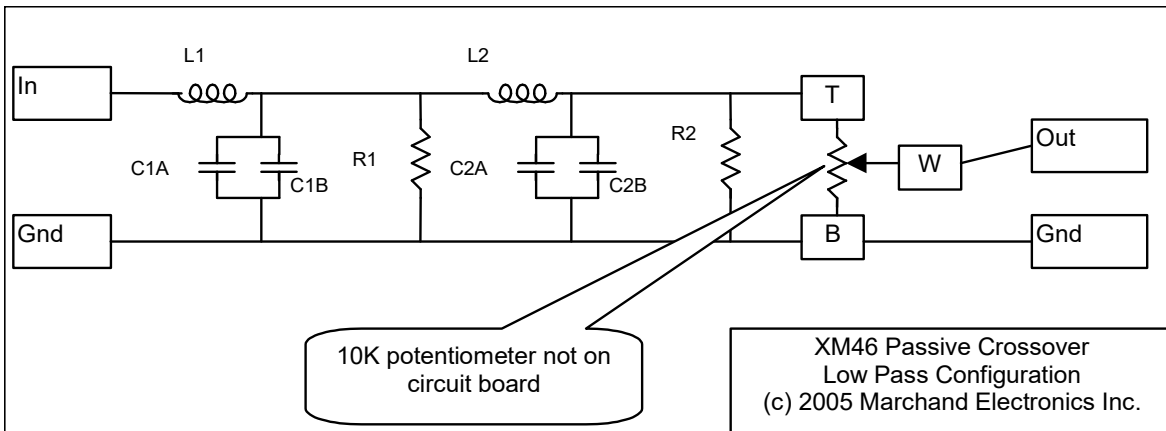
C1		Polypropylene Capacitor C1A=	C1B=
C2		Polypropylene Capacitor C2A=	C2B=
L1		Potcore inductor 1%	
L2		Potcore inductor 1%	
R1		1% metal film resistor	
R2		1% metal film resistor	

Low Pass Component values for Hz filter

C1		Polypropylene Capacitor C1A=	C1B=
C2		Polypropylene Capacitor C2A=	C2B=
L1		Potcore inductor 1%	
L2		Potcore inductor 1%	
R1		1% metal film resistor	
R2		1% metal film resistor	

Notes:





Assembly Instructions.

1: Configure board for High-Pass or Low-Pass.

Using bare wire install 4 jumpers on each circuit board.
The board can be configured for high-pass or low pass with these jumpers.
See picture for direction of jumpers.

2: Installation of potcore inductors.

Secure the inductors to the circuit board using nylon bolt and nut.
Use a fiber washer between inductor and circuit board.
Solder the two leads of each of the inductors to the pads on the circuit board.
For best result use some glue (like silicone glue) between inductor and circuit board.
Note: make sure the potcore inductor does not touch the configuration jumpers.
The ferrite material of the potcore is conductive.

3: Remaining parts.

The terminal blocks, capacitors and resistors are installed in the usual way.

4: Level control.

A level control potentiometer or attenuator can be installed at the terminal block labeled T-W-B.
The value of the potentiometer is typically 10 Kohm.
If no potentiometer is used connect a jumper wire between terminals T and W and also connect a 10 Kohm resistor between terminals T and B.