

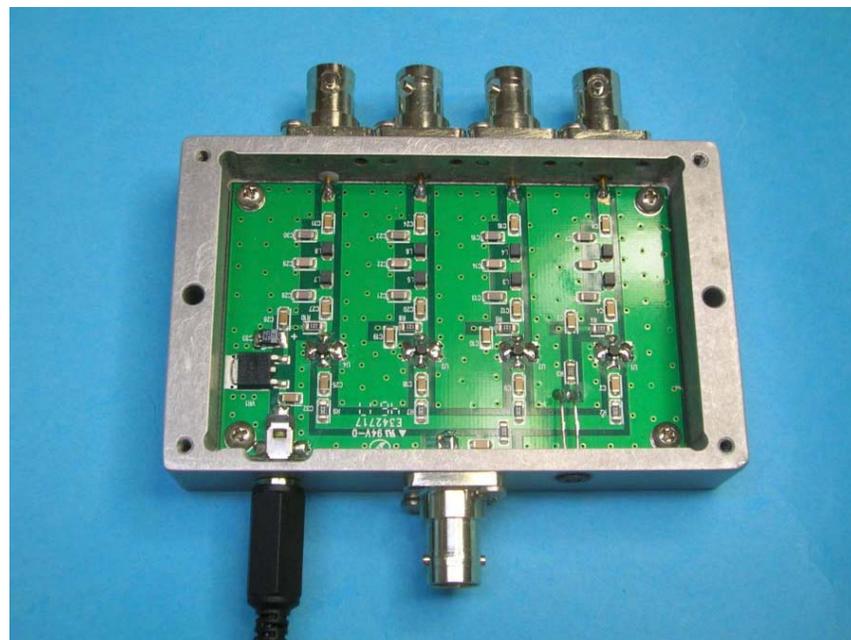
DEM L10-4

10 MHz. Amplified and Filtered 4 way divider

DESCRIPTION: The DEM L10-4 was designed to utilize one single 50 Ohm 10 MHz signal input up to a level of +10dBm and provide 4 separate filtered 50 Ohm 10 MHz outputs at or near the same level with all harmonic levels much lower than the original input signal. This design also maintains high port to port isolation. The DEM L10-4 is available as an assembled unit, as a complete kit as the DEM L10-4CK, and as a board kit as the DEM L10-4B. The assembled and CK version are provided with BNC type connectors as a standard but may be ordered with SMA female connectors or combinations of for an additional cost. The DC power is provided with a matching set of DC connectors for easy hook up. The B version is a pre-assembled circuit board only requiring the 4 MMIC's, and one large chip capacitor to be installed for operation and ready for your own enclosure.



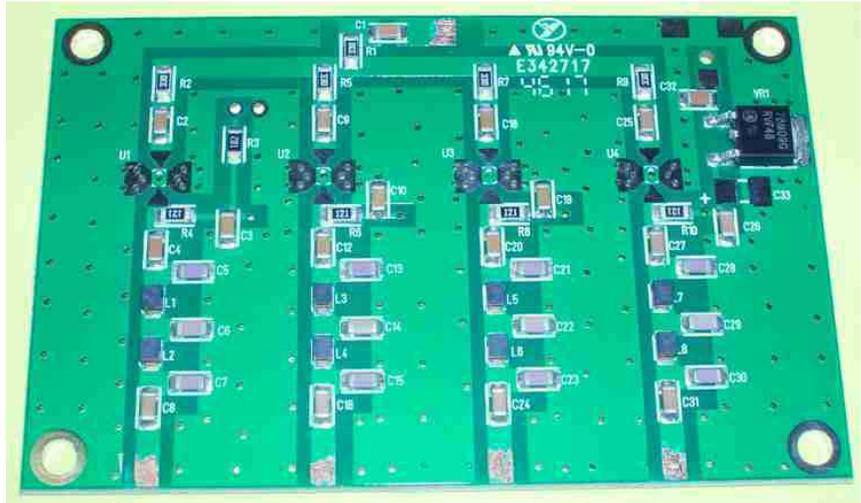
OPERATION: The assembled DEM L10-4 is easy to use. There are no adjustments to make or levels to set. Just simply connect a DC supply between 11 and 18 VDC that can source 200 mA. Then connect your 10 MHz input signal not exceeding +10dBm. The 4 outputs will then produce the same level output (+/- 1 dB) of 10 MHz signal with the harmonic level being less than -35dBc.



Be sure to terminate the unused ports when in use or when testing. Output port to input port isolation is >35dB. Output port to output port isolation is >25dB. Isolation is all measure with DC voltage applied. If you need more than 4 ports, simply add an additional DEM L10-4 to one of the output ports to increase it to 7 ports. You may add as many DEM L10-4's as you desire because the levels will remain the same as the input within +/- 2 dB. You will also find that with the standard mounting holes provided in the enclosure that stacking the units is quite easy with simple hardware.

COMPLET KIT AND BOARD KIT:

The picture to the right shows the factory assembly PC board as provided in our Complete Kit with our supplied enclosure and as our Board Kit. It is all surface mount assembly and pretested for short circuits. The factory board requires the additional assembly of 4 MMIC's (Amplifiers) and one Tantalum chip capacitor to complete it. Then after the RF and DC connections are completed with our supplied enclosure or yours, a few basic DC voltage tests are required to verify operation and it is ready for use in your system.



ADVANTAGE OF USING A L10-4: There are some advantages in using this 10 MHz 4 way divider. One is it will clean up any dirty 10 MHz source's 2nd and 3rd or higher harmonics that make some reference lock or synthesized circuits operate erratically. Another advantage is you may only have one 10 MHz source. The 10-4 eliminates the reason to purchase other sources that may or may not be on the same frequency. OR-- if you have invested in a GPSO, why not just distribute its signal throughout your shack and to any equipment that has an external 10 MHz input keeping all of your equipment on the same standard. It's far better than "Tee'ing" all of the connections together because the level will decrease.

