Electro-Resales

QRP 50 Ω Dummy Load

Many thanks for purchasing this low power dummy load. It has been designed and engineered for long usable life. The following notes are designed to help get the most form this load.

- 1. Always attach the load directly to the antenna or test port when possible, using jumper leads or lots of adapters can affect the loads impedance/SWR.
- 2. When testing with a transmitter start at the lowest power that gives accurate readings, work up to the maximum output for the load.
- 3. The load has a maximum continuous rating of 12 Watts RF, at this wattage the load resistors will get hot/warm, allow time for cool down between tests.
- 4. For brief periods of operation the load can be used to 25 watts RF, please do not exceed this rating or use for more than 1-3 seconds at a time, and allow the resistors ample cool down time, between tests.
- 5. To calculate the wattage from the test port attach a DC voltmeter to the screw terminals, with the positive lead attached to the terminal nearest the top board edge, and ground to the other terminal.
- Using the calculation : Volts DC²/100 = Watts For example a measured voltage of 25 volts becomes, 25²/100 = 625/100 = 6.25 W
- 7. The dummy load can also be used to test or assist in calibration of equipment like antenna analyzers, as it presents near 50Ω impedance. Again attach directly to the test port where possible to reduce variations in impedance.
- SWR measurements with an MFJ antenna analyzer showed a 1.0: 1.0 SWR from 1.7 MHz to 110 MHz above 110 MHz the SWR rose to 1.1:1.0 up to 170MHz. At 415MHz the SWR was measured at 2.5:1.0, and at 470 MHz 3.0:1.0
- 9. At all times exercise due care and attention when operating RF transmitting equipment to ensure your own and others safety.



The small Print

DISCLAIMER

Any person who constructs or works on electronic equipment may be exposed to hazards, including physical injury, the risk of electric shock or electrocution. These hazards can result in health problems, injury, or death. Only qualified persons who understand and are willing to bear these risks themselves should attempt the construction of electronic equipment. By purchasing this item, the buyer acknowledges these risks.

There is a risk of electric shock, electrocution, burns, or fires that is inherent in the construction and use of electronic equipment. By purchasing this item, the buyer acknowledges these risks.

IN NO EVENT SHALL THE SELLER BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE including, but not limited to, property damage, personal injury, death or legal expenses. Buyer's recovery from Seller for any claim shall not exceed the purchase price paid by Buyer for the goods, irrespective of the nature of the claim, whether in warrant, contract or otherwise. By purchasing this item, BUYER AGREES TO INDEMNIFY, DEFEND AND HOLD SELLER HARMLESS FROM ANY CLAIMS BROUGHT BY ANY PARTY REGARDING ITEMS SUPPLIED BY SELLER AND INCORPORATED INTO THE BUYER'S PRODUCT.



SWR Table

Test Frequency	SWR Measured*	Notes
1.7 – 50 MHz	1.0 : 1.0	
50.5 – 110 MHz	1.0 : 1.0	
110.5 – 170 MHz	1.1 : 1.0	
415 MHz	2.3 : 1.0	
435 MHz	2.5 : 1.0	
450 MHz	2.6 : 1.0	
470 MHz	3.0:1.0	

*Measured with an MFJ Antenna Analyzer Model # 269

Your notes



Schematic



PCB Layout



QRP Dummy Load data sheet - C16