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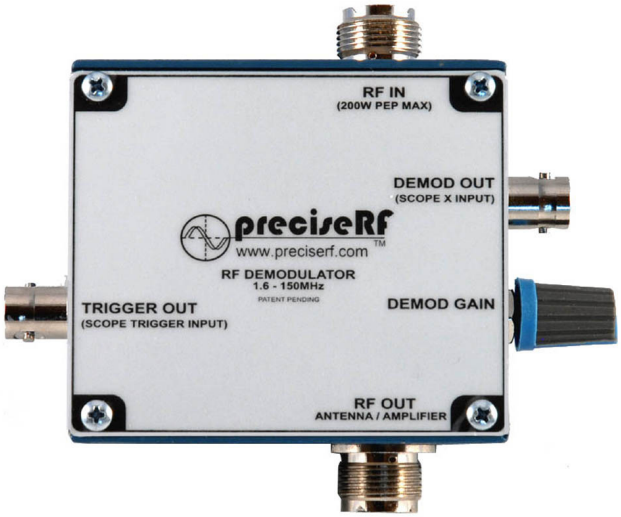
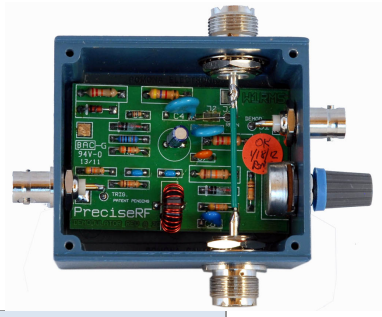
SMD-Pro Demodulator
DATA SHEET



This RF Demodulator is identical to the SMT-Pro Station Monitor but with addition of the integrated sampler/coupler. It is recommended for those wishing to use a separate sampler.

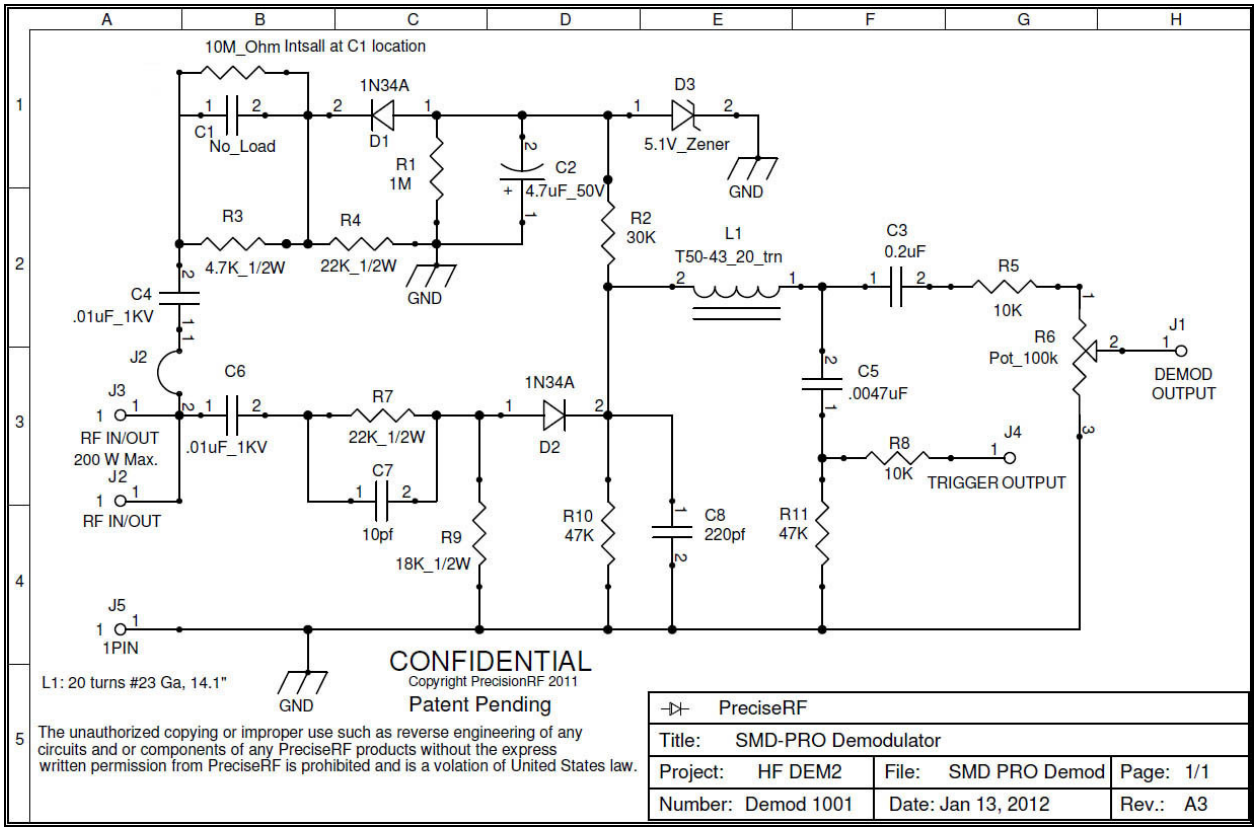
This SMD-Pro is intended for (QRP) and higher power (QRO) operation. It includes the optional detector biasing supply. When combined with an RF sampler, it allows for precise adjustment of the entire transmitter chain with transceiver output of up to 100 Watts driving linear RF amplifiers. It features a high performance demodulator, a variable base band output and an oscilloscope trigger output.



A Linear RF amplifier usually amplifies an RF signal from 20-100 Watts by 20dB or more to about 500-1,500 Watts. Its performance and modulation can be characterized using a spectrum analyzer (expensive) or a low cost oscilloscope using a trapezoid display.

Specifications	
Maximum RF IN:	200W PEP with crest factor of 4: 1
Bandwidth:	2MHz - 150MHz
Isolation RF IN/OUT to DEMOD OUT:	> 50dB
Insertion loss:	Negligible
VSWR :	Better than 1.1:1
Return loss: >	25dB
Impedance DEMOD RF IN/OUT:	50ohms
Connectors RF IN/OUT:	SO-239
Baseband RF detection:	AM and SSB
Bandwidth Baseband:	10Hz – 30KHz
Spurious THD:	< -60dB
Linearity 0-100% modulation:	Better than <1%
Rise/fall time:	< 10us aberrations less than 5%
Output modulation level:	-20dB externally variable
Output trigger level:	>1.5V p-p
Impedance DEMOD OUT:	47K
Impedance TRIGGER OUT:	47K
Physical:	1 lbs 4 x 3 x 1.2 in
Application:	Generate a baseband signal for the oscilloscope X (horizontal) input by demodulating SSB and AM signals when testing transceiver and RF amplifiers using the trapezoid method.

Each SMD-Pro Demodulator comes completely assembled in a premium shielded die cast aluminum alloy A380 housing. The housing is blue baked enamel per Federal Standard 595 #25109 over primer wash per DOD-P-15328.



All products are calibrated and tested to meet or exceed published specifications. The optional NIST calibration certificate is provided for users needing a calibration reference showing the actual performance achieved. This calibration is done using NIST traceable instruments. Some test and measurement equipment was calibrated at the PreciseRF laboratory using NIST traceable instruments. The item calibrated may be used as a calibration reference only, and shall not be used as a NIST calibration standard. This certificate shall not be reproduced without the express written permission from the calibration facility.

PreciseRF warrants its products to be free from defects in material and workmanship for one (1) year from the date of purchase. If you need support or service for your PreciseRF product, whether the product is under warranty or otherwise, please contact PreciseRF and arrange for a return or repair authorization. Manufactures Suggested Retail Price (MSRP). Prices and specifications subject to change without notice.

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