

This RF Demodulator is identical to the SMT Station Monitor, but, without the integrated sampler/coupler. It is recommended for those wishing to use a separate sampler. The SMD is intended for higher power (QRO) operation. It does not include the optional detector biasing supply recommended for lower power (QRP) operations.

When combined with an RF sampler, the SMT 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.

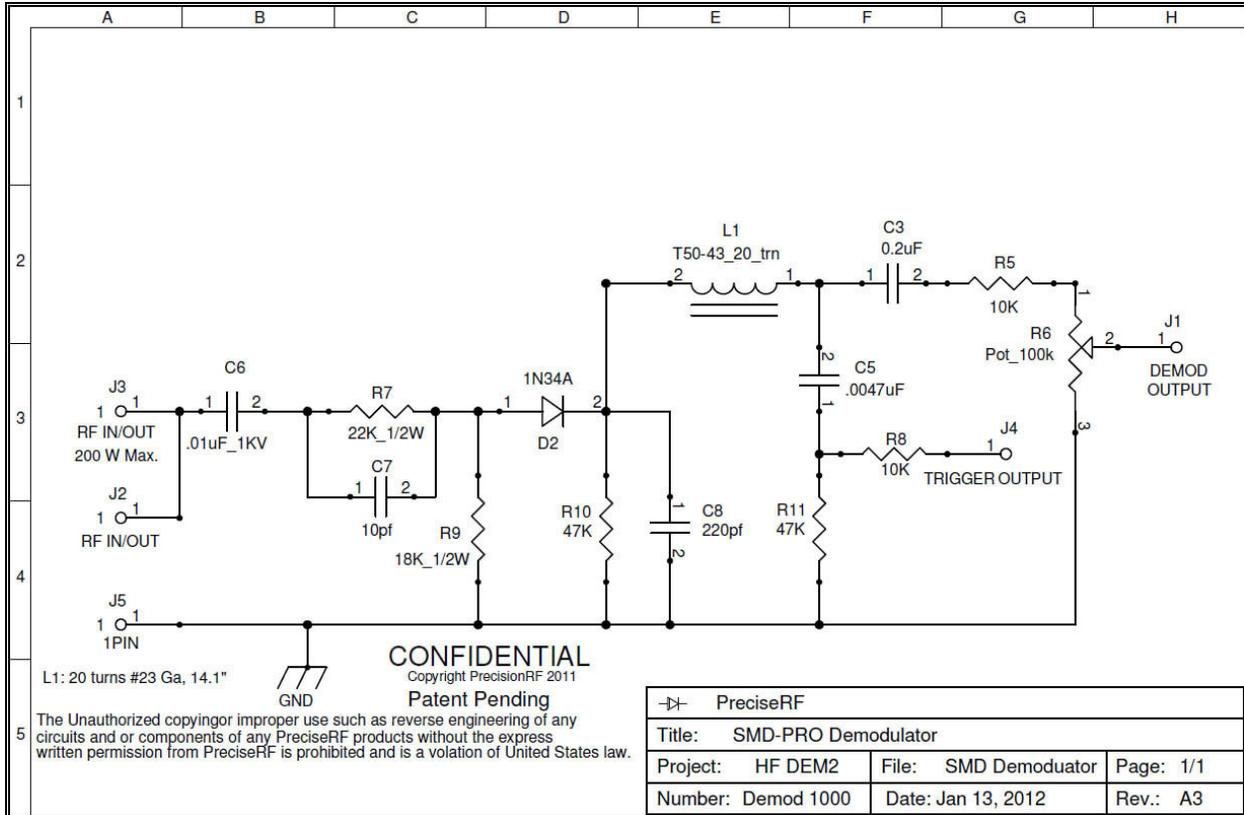
Specifications

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 5-100% modulation:	Better than <1%
Linearity 0-5% modulation:	Better than <10%
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:	
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 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.

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