

136-174MHz Power Amplifier Module

Model: TSVHF-136-174M-40W-48V-45dBc



Tone Spread
Solutions for Wireless Signal

Communications Technology & Engineering Accessories

Rev.V1.0

136-174MHz Power Amplifier Module

Tone Spread Amplifiers are suitable for frequency bands ranging from 20MHz to 6GHz, the output power can be customized from 1 Watts to 200 Watts.

The amplifiers utilize the cutting edge Solid-State technologies, such as GaN, LDMOS, with multi-measures, such as advanced broadband RF matching networks and combining technologies (Doherty design), then provide exceptional performance with high gain, high efficiency, wide dynamic range, low distortions, and good linearity.

The amplifiers have a variety of applications including Aerospace, Military, Radar, Electronic Warfare, Communication system (Repeater/BDA, RF Jammer, IMSI catcher), SATCOM, EMI/RFI testing, Lab test and measurement, PIM testing and so on.

Tone Spread ISO9001:2015 quality management system assures consistent performance, high reliability and ruggedness.

Features

- ◆ Solid-state Class AB design
- ◆ High gain and high efficiency
- ◆ High input/output isolation
- ◆ Ultra-wide band
- ◆ Compact design and lightweight
- ◆ Built-in protection and monitoring circuits

Technical Specifications

Items	Specifications
Frequency Range	136~174MHz
Maximum Output Power	46±1dBm
Maximum Input Power	+0dBm
Maximum Gain	55±1dB
Gain Variation with Temperature	≤2dB
ALC Range	≥10dB
VSWR	≤1.4
Ripple	≤2dB
Third-order Intermodulation	≤-45dBc(600KHz Frequency Spacing)
Working Voltage	DC48V
Working Current	≤5.5A
Impedance	50Ω
D-sub 9Pin Male Control Interface Pin Map	1. GND 2. NC 3. VSWR Alarm: Alarm Output When VSWR Reaches 3:1 4. Over Power Alarm: 49±0.5 dBm 5. NC 6. EN Enable: Enable (Low-level enable; High-level / Open-circuit disable), TTL Level (Low: ≤0.7 V; High:

All specifications are subject to change without notice.

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	$\leq 4.8\text{ V}$ 7. GND 8. Forward Power Detection: Outputs 4.0 V under the Condition of 46 dBm Continuous Wave 1FA; 100 mV/dB 9. Over Temperature Alarm: Alarm Output When Temperature Reaches $85^{\circ}\text{C} \pm 5^{\circ}\text{C}$
RF Connector	SMA-Female
Dimension	200*160*24mm(Estimate)
Working Temperature	$-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$