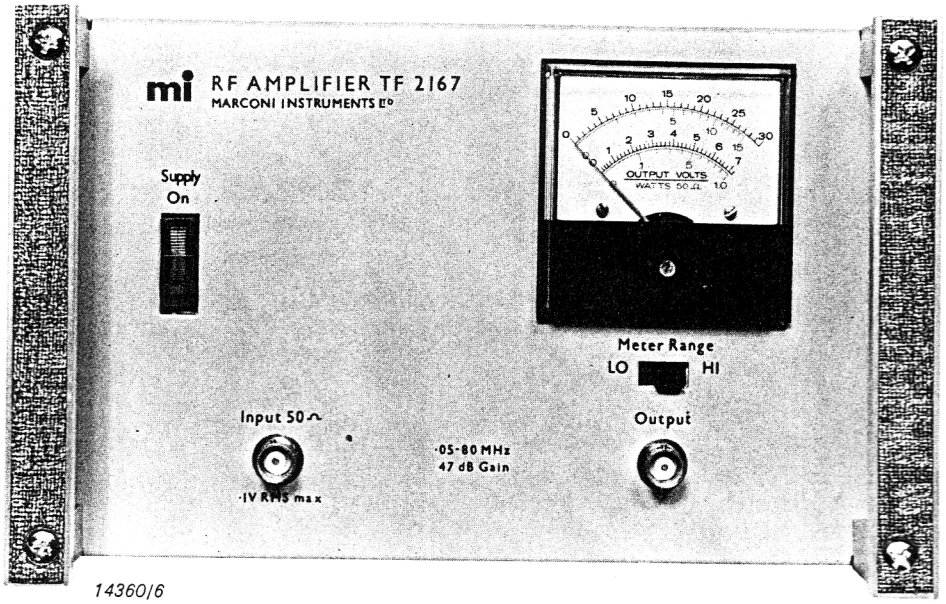
TF 2167 RF Amplifier

- ☐ Up to 10 W monitored output
- ☐ 50 kHz to 80 MHz bandwidth
- ☐ 47 dB gain



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The TF 2167 is a broad-band, solid-state power amplifier for use over the frequency range 50 kHz to 80 MHz. It is capable of delivering up to 10 watts into a 50 Ω load, with low harmonic and intermodulation distortion, and its 47 dB gain enables the full output to be obtained with an input voltage of less than 100 mV. The output level is accurately monitored by a front-panel meter with two switch selected ranges (0 to 7 volts and 0 to 30 volts), giving good discrimination at low levels.

The instrument is protected against input and output overloads and providing that the input level is within 100 mV the output may be open-circuited or short-circuited without damage to the instrument. Input levels up to 3 volts will not damage the amplifier provided it is correctly loaded. A Thermal cut-out switch provides further protection against overheating.

Freedom from the need for tuning or band-switching enables the amplifier to be used with maximum convenience in conjunction with a low-power, variable frequency, signal source – such as a signal generator or sweep generator – for a number of applications. These include calibration and test of r.f. voltmeters and power meters, measurement of feeder loss or v.s.w.r. by monitoring the forward and return power, and plotting the radiation patterns of aerials. The high level r.f. output available is also useful in the calibration of attenuators, in tests on filters, and for testing such components as r.f. transformers, capacitors, and dummy loads. The TF 2167 may also be used as a driver amplifier for checking the output stage of an h.f. transmitter, with a signal generator or sweeper as the primary source. Most modulated signals can be amplified to high power levels without significant distortion.

The instrument is compact and portable, the need for very large dissipative components being obviated by the use of forced air cooling. It is normally housed in a well ventilated cabinet suitable for bench use, but is also available in standard 19-inch rack mounting form.

FREQUENCY	
Bandwidth	50 kHz to 80 MHz.
Response characteristic	Flat ± 1 dB over above bandwith when feeding 50 Ω load.
OUTPUT LEVEL	10 W p.e.p. (max.) into 50 Ω load.
GAIN	At least 47 dB.
OUTPUT MONITOR	
Voltage ranges	0 to 7 V, 0 to 30 V, switch selected.
Voltage accuracy	± 3% f.s.
Power ranges	0 to 1 W, 0 to 15 W, switch selected.
Power accuracy	±6% f.s.
SIGNAL PURITY	
Harmonic distortion	Total harmonic content is less than −30 dB relative to fundamental.
Hum and noise	Less than −70 dB relative to 10 W.

INPUT CONDITIONS	
Input impedance	50 Ω.
VSWR	1·15 : 1
Maximum rated input level	0·1 V.
CONNECTORS	BNC input and output.
SAFETY	Complies with the requirements of IEC 348.
POWER REQUIREMENTS	
AC supply	105 to 125 V and 210 to 250 V. 50 to 60 Hz.

DIMENSIONS AND WEIGHT

Height	Width	Depth	Weight
130 mm	220 mm	370 mm	9 kg
5¼ in	8½ in	14¼ in	20 lb

VERSIONS AND ACCESSORIES

When ordering please quote eight-digit code numbers

Ordering numbers	
52167-301Z	**Versions** RF Amplifier TF 2167.
54127-011N	**Optional Accessory** Standard 19 inch Rack Mounting Kit.

Made in U.S.A.