

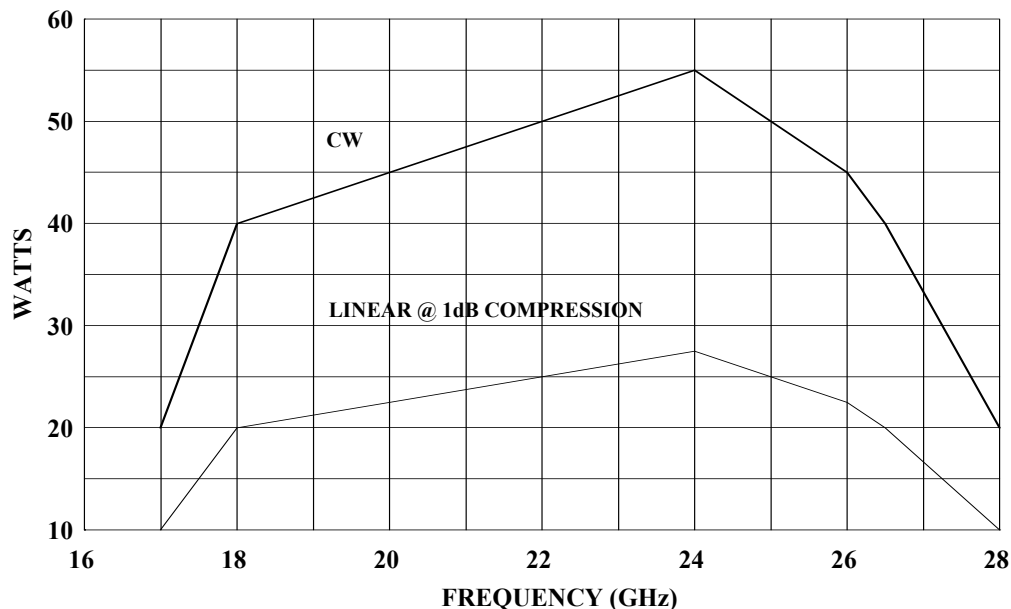
The Model 40T18G26A is a self contained, forced air cooled, broadband traveling wave tube (TWT) microwave amplifier designed for applications where wide instantaneous bandwidth, high gain and moderate power output are required. A reliable TWT provides a conservative 40 watts minimum at the amplifier output connector. Stated power specifications are at the fundamental frequency.

The amplifier's front panel digital display shows forward and reflected output plus extensive system status information accessed through a series of menus via soft keys. Status indicators include power on, warm-up, standby, operate, faults, excess reflected power warning and remote. Standard features include a built-in IEEE-488 (GPIB) interface, 0dBm input, VSWR protection, gain control, RF output sample port, plus monitoring of TWT helix current, cathode voltage, collector voltage, heater current, heater voltage, baseplate temperature and cabinet temperature. Modular design of the power supply and RF components allow for easy access and repair. Use of a switching mode power supply results in significant weight reduction.

Housed in a stylish contemporary cabinet, the unit is designed for benchtop use but can be removed from the cabinet for rack mounting. The Model 40T18G26A provides readily available RF power for a variety of applications in Test and Measurement, (including EMC RF susceptibility testing), Industrial and University Research and Development, and Service applications. These sub-octave amplifiers feature moderate harmonic content.

Refer to Model Configuration Chart for alternative configurations.

**40T18G26A TYPICAL POWER OUTPUT**



## SPECIFICATIONS

### Model 40T18G26A

#### POWER (fundamental), CW, @ OUTPUT CONNECTOR

Nominal .....	45 watts
Minimum.....	40 watts
Linear @ 1 dB Compression .....	20 watts minimum
FLATNESS.....	± 8 dB maximum
FREQUENCY RESPONSE.....	18 - 26.5 GHz instantaneously
INPUT FOR RATED OUTPUT.....	1.0 milliwatt maximum
GAIN (at maximum setting).....	46 dB minimum
GAIN ADJUSTMENT (continuous range).....	35 dB minimum
INPUT IMPEDANCE.....	50 ohms, VSWR 2.0:1 maximum
OUTPUT IMPEDANCE.....	50 ohms, VSWR 2.5:1 typical
MISMATCH TOLERANCE.....	Output power foldback protection at reflected power exceeding 10 watts. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.
MODULATION CAPABILITY.....	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal. AM peak envelope power limited to specified power.
NOISE POWER DENSITY.....	Minus 60 dBm/Hz (maximum) Minus 65 dBm/Hz (typical) See Model Configurations
HARMONIC DISTORTION .....	Minus 20 dBc maximum Minus 28 dBc typical
PRIMARY POWER.....	99-260 VAC 50/60 Hz single phase 850 VA maximum
<b>CONNECTORS</b>	
RF input.....	Type K female on rear panel
RF output.....	Type WR-42 waveguide flange on rear panel
RF output sample port.....	Type K female on rear panel
GPIB .....	IEEE-488 on rear panel
Interlock.....	DB-15 female on rear panel
COOLING .....	Forced air (self contained fans), air entry and exit in rear
WEIGHT .....	See Model Configuration
SIZE (W x H x D).....	See Model Configurations

## MODEL CONFIGURATIONS

Model Number	Description	Weight	Size (W x H x D)
40T18G26A	With removable enclosure	37 kg (80 lb)	50.3 x 16.5 x 68.6 cm 19.3 x 6.5 x 27 in
40T18G26AM1	Enclosure removed for rack mounting	30 kg (65 lb)	48.3 x 13.3 x 68.6 cm 19.0 x 5.25 x 27 in
40T18G26AM2	Enclosure removed for rack mounting - slides and front handles installed	32 kg (70 lb)	48.3 x 13.3 x 68.6 cm 19.0 x 5.25 x 27 in
40T18G26AM3	See Individual Specification Sheet. Version offers external isolator for extended operation at high VSWR, and other special features.		
40T18G26AM4	Enclosure removed for rack mounting, flatness ± 4 dB max at rated power	30 kg (65 lb)	48.3 x 13.3 x 68.6 cm 19.0 x 5.25 x 27 in