rf/microwave instrumentation

Model ATH18G27-1
Antenna
18GHz–26.5GHz

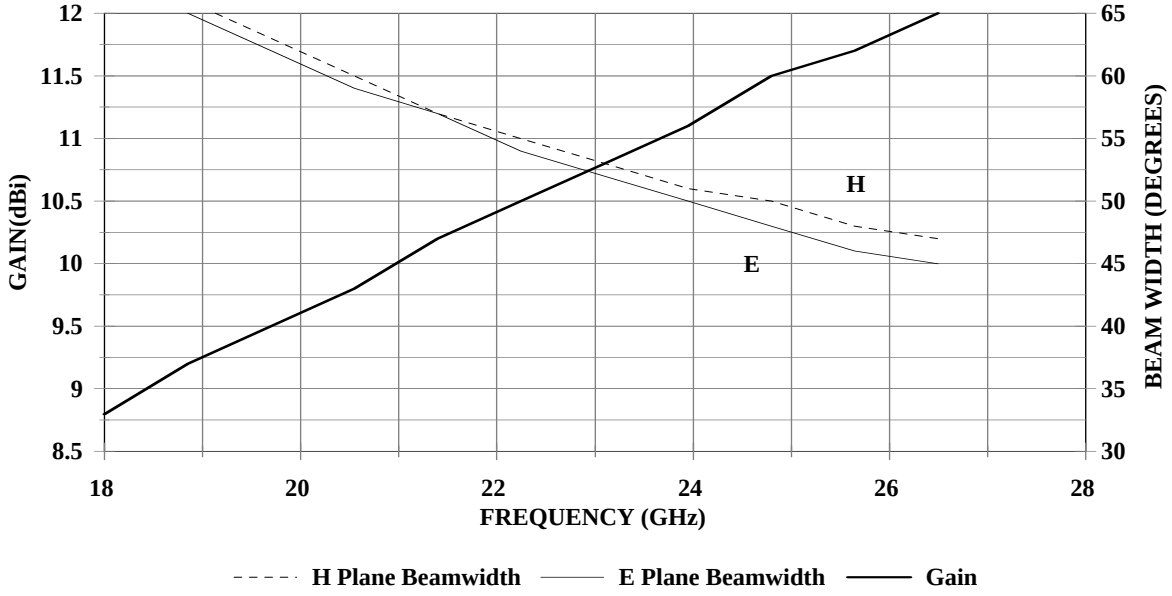
The Model ATH18G27-1 is a wide band, low gain, wide beamwidth, high power microwave horn antenna. With a minimum gain of 8.8dB over isotropic, the Model ATH18G27-1 supplies the high intensity fields necessary for RFI/EMI field testing within and beyond the confines of a shielded room. The Model ATH18G27-1 is extremely compact and light weight for ready mobility, yet is built tough enough for the extra demands of outdoor use and easily mounts on a rigid waveguide by the waveguide flange. Part of a family of microwave frequency antennas, the Model ATH18G27-1 provides the 18.0-26.5GHz response required for many often used test specifications.

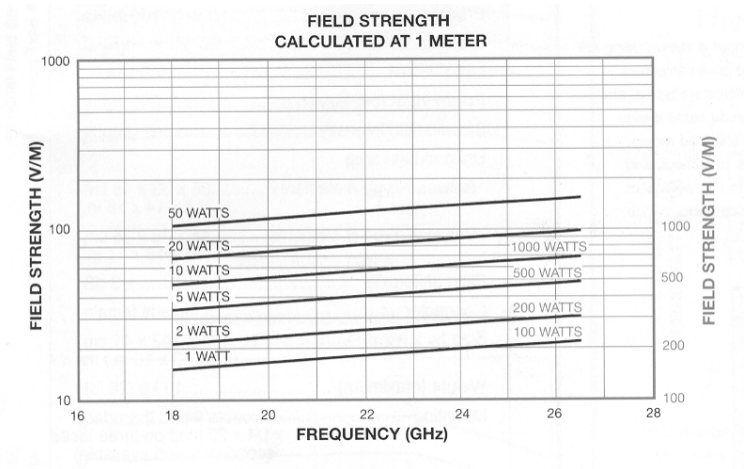
The ATH18G27-1 is ideally suited for use with the AR Models 40T18G26 and other high power amplifiers in this frequency range.

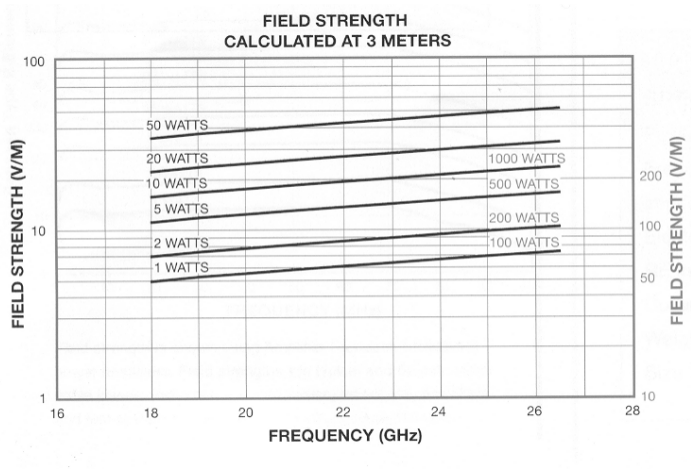
SPECIFICATIONS

FREQUENCY RANGE	18.0-26.5GHz
POWER INPUT (maximum)	350 watts CW
POWER GAIN (over isotropic)	See Curve
VSWR	
Maximum	1.5:1
Average	1.3:1
BEAM WIDTH (average)	See Curve
CONNECTOR	WR-42 waveguide
MOUNTING PROVISIONS	Waveguide flange
WEIGHT (maximum)	57 g. (2 oz.)
SIZE (WxHxD)	1.63 x 1.32 x 2.92 cm, (0.64 x 0.52 x 1.15 in)

ATH18G27-1 GAIN & 3dB BEAMWIDTH VS FREQ







Field strengths have been measured in free-space conditions. Individual shielded rooms, amplifiers, and test-system conditions will influence performance. Field strength also varies with frequency and position of antenna and EUT in non-anechoic testing environments.