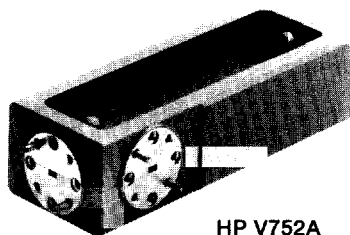


MICROWAVE TEST EQUIPMENT

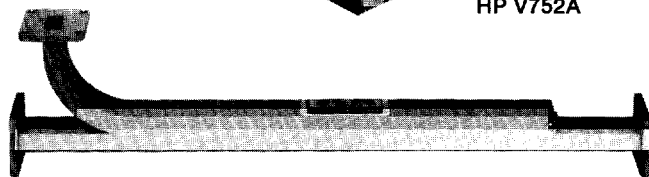
Frequency Meters, Isolators and Waveguide Directional Couplers

Models 365 Series, 532 Series, 537A, 752 Series

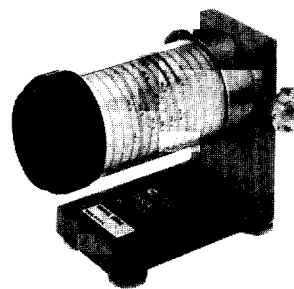
347



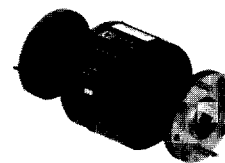
HP V752A



HP X752A



HP Q532A



HP Q365A

HP 752 Series Waveguide Directional Couplers

The HP 752 series Couplers are specified to meet a wide variety of microwave applications. Every coupler has a minimum directivity of 40 dB over its entire frequency range. Each coupler is swept-frequency tested to ensure that the main guide SWR and directivity specifications are accurate. Performance characteristics are unaffected by humidity, temperature, and time, making these units especially useful in microwave "standards" measurements.

The HP 752 Couplers are an essential part of many waveguide measurement systems. Attenuation measurements, reflectometer setups, power measurements, source leveling and network analysis are just a few areas in which these couplers are used.

HP 752 Series Specifications

HP Model	Frequency Range (GHz)	Nominal Coupling (dB)	Mean Coupling Accuracy (dB)	Maximum Coupling Variation (dB)	Minimum Directivity (dB)	Waveguide & Flange	Price
X752A	8.2-12.4	3	±0.4	±0.6	40	WR90 UG-135/U	\$800
X752C		10					
X752D		20					
P752A	12.4-18.0	3	±0.4	±0.5	40	WR62 UG-419/U	\$800
P752C		10					
P752D		20					
K752A	18.0-26.5	3	±0.7	±0.5	40	WR42 UG-595/U	\$1000
K752C		10					
K752D		20					
R752A	26.5-40.0	3	±0.7	±0.6	40	WR28 UG-599/U	\$1050
R752C		10					
R752D		20					
R752AS	26.5-40.0	3	±0.7	±0.6	40	WR28 UG-599/U	\$800
R752CS		10					
R752DS		20					
Q752A	33.0-50.0	3	±0.7	±0.7	36	WR-22 UG-383/U	\$800
Q752C		10					
Q752D		20					
U752A	40.0-60.0	3	±0.7	±0.7	36	WR-19 UG-383/U (Mod.)	\$850
U752C		10					
U752D		20					
V752C	50.0-75.0	10	±1.0	±1.0	33	WR 15 UG-381/U	\$850
V752D		20					
W752C	75.0-110.0	10	±1.0	±1.0	30	WR 18 UG-387/U (Mod.)	\$850
W752D		20					

HP 365A Millimetre-Wave Waveguide Isolators

The HP Q and U365A Isolators use a Faraday-rotation-type design consisting of a section of waveguide containing low-loss ferrite material and impedance matching elements. A permanent magnet supplies the external magnetic bias field to the ferrite core. This results in excellent broadband isolation ratios of at least 25 dB along with low SWR and insertion loss.

HP 365A Waveguide Isolator Specifications

HP Model	Frequency Range (GHz)	SWR (Max.)	Maximum Insertion Loss (dB)	Minimum Isolation (dB)	Maximum Input Power (Avg)	Waveguide & Equivalent Flange	Price
R365A	26.5-40.0	1.4	1.5	25	1.5W	WR-28 UG-599/U	\$825
Q365A	33-50	1.4	1.5			WR-22 UG-383/U	\$1040
U365A	40-60	1.4	1.8			WR-19 UG-383/U (Mod)	\$1240
V365A	50-75	2.0	3.0			WR-15 UG-381/U	\$1530
W365A	75-110	2.0	3.0			WR-10 UG-387/U (Mod)	\$2000

HP 532 Series, 537A Frequency Meters

These direct-reading frequency meters measure frequencies from 33.0 to 60.0 GHz in waveguide and from 3.7 to 12.4 GHz in coax quickly and accurately. Their long scales and numerous calibration marks provide high resolution which is particularly useful when measuring frequency differences or small frequency changes. Frequency is read directly in GHz so neither interpolation nor charts are required.

The instruments comprise a special transmission section with a high-Q resonant cavity which is tuned by a choke plunger. A 1 dB or greater dip in output indicates resonance; virtually full power is transmitted off resonance. Overall accuracy of each frequency meter includes allowance for 0 to 100 percent relative humidity and temperature variation from 13 to 33°C.

HP 532 Series, 537A Specifications

HP Model	Frequency Range (GHz)	Overall Accuracy (%)	Calibration Increment (MHz)	W/G-Coax Equivalent Flange (Connector)	Price
537A	3.7-12.4	0.170	10	Coax Type N(f)	\$1300
Q532A	33.0-50.0	0.12	20	WR-22 UG-383/U	\$2020
U532A	40.0-60.0	0.15		WR-19 UG-383/U (Mod.)	\$2125