## DIRECTIONAL COUPLERS

Waveguide



## 752 Series waveguide directional couplers

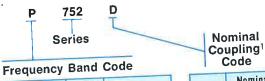
The HP 752 Series couplers are specified to meet a wide variety of microwave applications. Every coupler has a minimum directivity of 40 dB over its entire frequency range. Each coupler is swept-frequency tested to ensure that the main guide SWR and directivity specifications are accurate. Performance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

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



## How to order

When ordering a coupler the complete model number as listed in the table below must be specified. Example: if a 20-dB coupler that operates in the frequency range of 12.4 GHz to 18 GHz is desired, the model number P752D must be ordered.



Code	Frequency Band	Code	Frequency Band		
J	5.85 - 8.2 GHz	P	12.4 - 18 GHz		
H	7.05 - 10 GHz	K	18 - 26.5 GHz		
X	8.2 - 12.4 GHz	R	26.5 - 40 GHz		

Code	Nominal Coupling				
A	3 dB				
C	10 dB				
D	20 dB				

## **752 Series Specifications**

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	Frequency Range	Nominal <sup>1</sup> Coupling	Mean Coupling Accuracy (dB)	Maximum Coupling Variation (dB)	Minimum Directivity (dB)	SWR Primary Line Maximum	SWR Auxiliary Arm Maximum	Equivalent Flange	Maximum Primary Line Power (Watts)	Waveguide Size Nom. O.D. mm (in.) EIA	Length mm (in.)	Shipping Weight kg (lb)	Price
odel	(GHz)	(dB)	أعليت		40	1.1	1.15	UG-441/U	2	10.05	673 (261/2)	5.8 (13)	\$760
52A2	5.85 - 8.2	3	±0.4	±0.5		1.05	1.15	UG-441/U	10	38.10 x 19.05 (1.50 x 0.75)	649 (25%)	5.8 (13)	\$760
752C2	5.85 - 8.2	10	±0.4	±0.5	40			UG-441/U	100	WR137	649 (25%)	5.8 (13)	\$760
752D²	5.85 - 8.2	20	±0.4	±0.5	40	1.05	1.15		2		473 (185/8)	1.8 (4)	\$520
752A	7.05 - 10.0	3	±0.4	±0.5	40	1.1	1.15	UG-138/U	1	31.75 x 15.88		1.8 (4)	\$520
752C	7.05 - 10.0		±0.4	±0.5	40	1.05	1.15	UG-138/U	10	(1.25 x 0.625) WR112			\$520
-	7.05 - 10.0		+0.4	±0.5	40	1.05	1.15	UG-138/U	100		445 (171/2)	-	\$390
1752D			±0.4	±0.5	40	1.1	1.15	UG-135/U	2	25.40 x 12.70	424 (161)/		
(752A	8.2 - 12.4			±0,5	40	1.05	1.15	UG-135/U	J 10	(1.00 x 0.50) WR90	399 (15י),	3) 1.4 (3)	\$390
X752C	8.2 - 12.4	10	±0.4		40	1.05	1.15	UG-135/L	100	111130	399 (15י)/	6) 1.4 (3)	\$390
X752D	8.2 - 12.4	20	±0.4	±0.5			1.2	UG-419/1	1 2		349 (133/	0.9 (2)	\$350
P752A	12.4 - 18.0	3	±0.4	±0.5	40	1.1		UG-419/1		17.83 x 9.93 (0.702 x 0.39		0.9 (2)	\$350
P7520	12.4 - 18.	0 10	±0.4	±0.5	40	1.05	1.2			WR62	311 (121/	4) 0.9 (2)	\$35
P752[	12.4 - 18.	0 20	<u>+</u> 0.4	±0.5	40	1.05	1.2	UG-419/			270 (105		\$47
K752			±0.7	±0.5	40	1.1	1.2	UG-595/	U 1	12.70 x 6.35			
			±0.7	±0.5	40	1.05	1.2	UG-595/	U 5	(0.50 x 0.25 WR42		.01	
K752			±0.7		40	1.05	1.2	UG-595/	ับ 50		252 (915		
K752						1.1	1.2	UG-599	/U 1	9.14 x 5.59	295 (11	%) 0.45 (	\$60
R752	A 26.5 - 40	_	±0.7			1.05	1.2	UG-599	/U 5	(0.36 x 0.2	2) 219 (85	/ <sub>8</sub> ) 0.45 (	1) \$5
R752	26.5 - 40	).0 10	±0.7			1.05		UG-599	/U 50	WR28	222 (82	( <sub>32</sub> ) 0.45 (	1) \$5
R752	2D 26.5 - 40	0.0 20	±0.7	±0.6	6 40	1.03	1.2	00 500					\$1

Circular flange adapters available: For K-Band, specify 11515A (UG-425/U) For R-Band, specify 11516A (UG-381/U)

Nominal Coupling, Coupling Factor, and Coupling Attenuation are terms that describe the same parameter. 2 J752 Couplers operate down to 5.3 GHz with reduced performance.