

FEATURES

- ❖ 12 to 45 GHz
- ❖ Even power splitting
- ❖ Low insertion loss
- ❖ Wide bandwidth
- ❖ High port isolation

APPLICATIONS

- ❖ Laboratory
- ❖ Instrumentation
- ❖ Subsystems

DESCRIPTION

PPD series coax standard power dividers are available in 2 way and 4 way power splitting configuration to cover the frequency range of 12 to 45 GHz frequency range. Unlike their resistive counterpart, these power dividers offer extremely low insertion loss and high port to port isolation while having moderate operating bandwidth. The power dividers are ideal choices where the precise power splitting is required. The power dividers can be used as power combiners.



PPD Series

SPECIFICATIONS

Frequency Range (GHz)	12 to 18	18 to 25	20 to 30	25 to 35	30 to 40	35 TO 45
2 Way Power Dividers						
Model Number	PPD-SF150602	PPD-KF220802	PPD-KF251002	PPD-KF301002	PPD-KF351002	PPD-2F401002
Insertion Loss (dB Typical)	1.4	1.5	1.6	1.7	1.9	2.0
Amplitude Balance (dB Max)	± 0.12	± 0.15	± 0.18	± 0.20	± 0.22	± 0.25
Port Isolation (dB, Min)	20	20	20	20	20	20
VSWR (Typical)	2:1	2:1	2:1	2:1	2:1	2:1
Outline Drawing	WT-E-11	WT-E-11	WT-E-11	WT-E-11	WT-E-11	WT-E-11
4 Way Power Dividers						
Model Number	PPD-SF150604	PPD-KF220804	PPD-KF251004	PPD-KF301004	PPD-KF351004	PPD-2F401004
Insertion Loss (dB Typical)	2.4	2.5	2.6	2.7	2.9	3.0
Amplitude Balance (dB Max)	± 0.22	± 0.25	± 0.28	± 0.30	± 0.32	± 0.35
Port Isolation (dB, Min)	20	20	20	20	20	20
VSWR (Typical)	2:1	2:1	2:1	2:1	2:1	2:1
Outline Drawing	WT-E-12	WT-E-12	WT-E-12	WT-E-12	WT-E-12	WT-E-12

TECHNICAL NOTATION

- These power dividers offer wider operating bandwidth than shown above with moderate performance degradation. For example, PDD-KF301002 can cover 25 to 40 GHz frequency range with slightly higher VSWR (2.5:1) in 35 to 40 GHz frequency band.
- The standard products are equipped with K (2.92 mm) female coax connectors. Different type connectors, such as 2.4 mm or V connectors, both male and female type are available per request.
- To order the product with the specification other than listed, contact factory with your detailed requirement.

WT-E-1

BAND	L	H	A	H0
K	1.20	1.04	1.00	0.44
K _a	1.00	0.88	0.85	0.38
Q & U	1.40	1.27	1.16	0.57
V,E & W	1.00	0.88	0.80	0.38

Dimensions are in inches

WT-E-2

BAND	K	K _a	Q & U	V,E & W
L	Vary per Specifications			

Dimensions are in inches

WT-E-3

High Pass

BAND	K	K _a	Q & U	V,E & W
L	3.00	2.60	2.20	1.80

Dimensions are in inches

WT-E-4

Low Pass

BAND	K	K _a	Q & U	V,E & W
L	3.00	2.50	2.00	1.60

Dimensions are in inches

WT-E-5

BAND	X	WR-75	WR-62	K/WR-34	K _a , Q & U	V
L	1.40	1.25	1.20	0.85	1.00	1.05
L0	1.00	0.90	0.95	0.60	0.75	0.80

NOTES:
BOTH MALE AND FEMALE COAXIAL CONNECTORS ARE AVAILABLE FOR ALL BANDS

Dimensions are in inches

WT-E-6

PTW	BIGGER WAVEGUIDE BAND	K	K _a	Q	U	V	E
	L		2.00	2.00	1.50	1.50	1.00

PRC	RECTANGULAR WG BAND	K	K _a	Q	U	V	E	W
	L		2.00	1.50	1.30	1.30	1.10	1.10

Dimensions are in inches

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.

WT-E-7

BAND	K	Ka	Q	U	V	E	W
L	1.20	1.00	1.30	1.30	1.00	1.00	1.00
W	1.20	1.00	1.30	1.30	1.00	1.00	1.00
H	1.06	0.90	1.25	1.23	0.83	0.82	0.81

Dimensions are in inches

WT-E-8

Band	X	WR-75	Ku	K	Ka	Q	U	V	E	W
L	5.46	4.80	4.66	4.24	3.46	3.26	2.66	2.56	2.56	2.46
A	1.73	1.65	1.58	1.52	1.23	1.23	0.98	0.98	0.98	0.98
D	0.45	0.43	0.35	0.21	0.18	0.15	0.13	0.11	0.10	0.09
H	3.46	3.30	3.16	3.04	2.46	2.46	1.96	1.96	1.96	1.96

Dimensions are in inches

WT-E-9

BAND	Q	U	V	E	W
L	5.50	5.50	3.50	3.50	3.50
W	1.30	1.30	1.00	1.00	1.00
H	1.25	1.23	0.83	0.82	0.81
A	0.80	0.80	0.60	0.60	0.60

Dimensions are in inches

WT-E-10

Band	X	WR-75	Ku	K	Ka	Q	U	V	E	W
L	19.50	16.50	13.00	11.00	10.00	8.00	6.50	6.00	5.50	5.00
W	1.90	1.85	1.75	1.50	1.40	1.20	1.20	1.00	1.00	1.00
B	0.95	0.95	0.90	0.70	0.60	0.70	0.70	0.60	0.60	0.60
D	0.45	0.43	0.35	0.21	0.18	0.15	0.13	0.11	0.10	0.09

Dimensions are in inches

WT-E-11

Dimensions are in inches

WT-E-12

Dimensions are in inches

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.