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# PRECISION FIXED ATTENUATORS 50Ω SMA

**2W** 1 to 40 dB, DC to 18 GHz



BW

MODEL NO.	FREQ. RANGE GHz $f_l$ - $f_u$	ATTENUATION dB		VSWR (:1) Max.			POWER W**	CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-49)
		Nom.	ACCURACY*	<u>L</u>	<u>M</u>	<u>U</u>				
BW-S1W2	DC-18	1	±0.40	1.20	1.25	1.30	2	FF658	—	29.95
BW-S2W2	DC-18	2	±0.40	1.20	1.25	1.30	2	FF658	—	29.95
BW-S3W2	DC-18	3	±0.40	1.20	1.25	1.30	2	FF658	—	29.95
BW-S4W2	DC-18	4	±0.40	1.20	1.25	1.30	2	FF658	—	29.95
BW-S5W2	DC-18	5	±0.40	1.20	1.25	1.30	2	FF658	—	29.95
BW-S6W2	DC-18	6	±0.40	1.20	1.25	1.30	2	FF658	—	29.95
BW-S7W2	DC-18	7	±0.60	1.20	1.25	1.30	2	FF658	—	29.95
BW-S8W2	DC-18	8	±0.60	1.20	1.25	1.30	2	FF658	—	29.95
BW-S9W2	DC-18	9	±0.60	1.20	1.25	1.30	2	FF658	—	29.95
BW-S10W2	DC-18	10	±0.60	1.20	1.25	1.30	2	FF658	—	29.95
BW-S12W2	DC-18	12	±0.60	1.20	1.25	1.30	2	FF658	—	29.95
BW-S15W2	DC-18	15	±0.60	1.20	1.25	1.30	2	FF659	—	29.95
BW-S20W2	DC-18	20	±0.60	1.20	1.25	1.30	2	FF659	—	29.95
BW-S30W2	DC-18	30	±0.85	1.20	1.25	1.30	2	FF659	—	29.95
BW-S40W2	DC-18	40	±0.85	1.20	1.25	1.30	2	FF659	—	29.95

L = DC-4 GHz

M = 4-8 GHz

U = 8-12.4 GHz

## features

- precision attenuation
- excellent VSWR, 1.2:1 typ.
- high temperature stability
- SMA male and female connectors

## applications

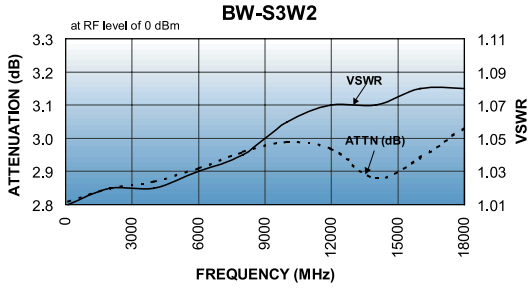
- matching
- instrumentation
- test set-ups

## designers kits available

KIT No.	No. of Units in KIT	Description	Price \$ per KIT
K2-BW1	6	2 of each: 3,6,10	150.00
K2-BW2	6	1 of each: 3,6,10,20,30,40	150.00
K2-BW3	10	1 of each: 1,2,3,4,5,6,7,8,9,10	200.00

## NOTES:

- \* At 25°C includes power & frequency variations up to 12.4 GHz. Above 12.4 GHz add 0.5 dB typ. to accuracy and 0.3 typ. to VSWR in the U range. Temperature coefficient for attenuation .0004 dB/dB/°C typ.
- \*\* Average power at 25°C ambient, derate linearly to 0.5 W at 100°C. Peak Power 125W max., 5µsec pulse width, 100 Hz PRF.
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in General Information (Section 0).
- B. Connector types and case mounted options, case finishes are given in section 0, see "Case styles & outline drawings".
- C. Prices and specifications subject to change without notice.

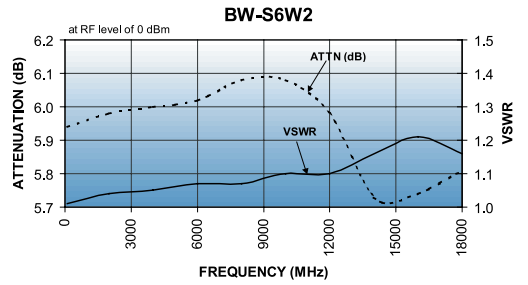


FREQUENCY (MHz)
100.00
2000.00
4000.00
6000.00
8000.00
10000.00
12000.00
14000.00
16000.00
18000.00

ATTENUATION	
$\bar{X}$ (dB)	$\sigma$ (dB)
2.81	0.02
2.85	0.02
2.87	0.03
2.91	0.04
2.96	0.05
2.99	0.05
2.97	0.04
2.88	0.17
2.94	0.17
3.03	0.13

DC to 18000 MHz  
VSWR

$\bar{X}$	$\sigma$
1.01	0.01
1.02	0.01
1.02	0.01
1.03	0.00
1.04	0.01
1.06	0.01
1.07	0.02
1.07	0.02
1.08	0.03
1.08	0.02

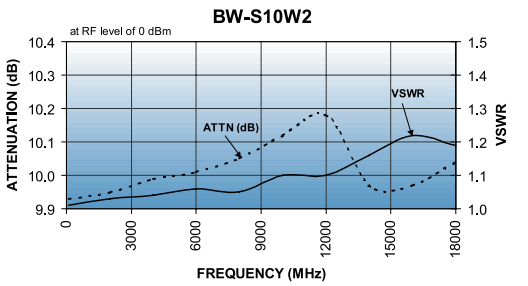


FREQUENCY (MHz)
100.00
2000.00
4000.00
6000.00
8000.00
10000.00
12000.00
14000.00
16000.00
18000.00

ATTENUATION	
$\bar{X}$ (dB)	$\sigma$ (dB)
5.94	0.03
5.98	0.02
6.00	0.02
6.02	0.04
6.08	0.10
6.08	0.12
5.98	0.11
5.73	0.07
5.74	0.08
5.81	0.10

DC to 18000 MHz  
VSWR

$\bar{X}$	$\sigma$
1.01	0.00
1.04	0.00
1.05	0.01
1.07	0.01
1.07	0.01
1.10	0.03
1.10	0.03
1.16	0.02
1.21	0.03
1.16	0.02

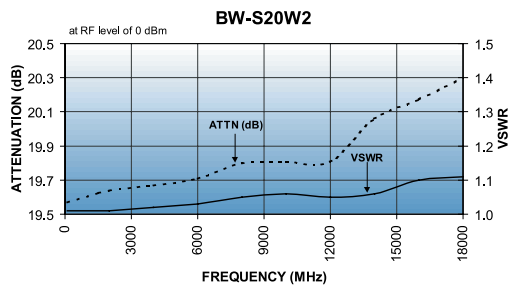


FREQUENCY (MHz)
100.00
2000.00
4000.00
6000.00
8000.00
10000.00
12000.00
14000.00
16000.00
18000.00

ATTENUATION	
$\bar{X}$ (dB)	$\sigma$ (dB)
9.93	0.03
9.95	0.02
9.99	0.01
10.01	0.01
10.05	0.01
10.12	0.03
10.18	0.10
9.97	0.15
9.97	0.18
10.04	0.21

DC to 18000 MHz  
VSWR

$\bar{X}$	$\sigma$
1.01	0.00
1.03	0.00
1.04	0.00
1.06	0.01
1.05	0.01
1.10	0.02
1.10	0.03
1.16	0.04
1.22	0.04
1.19	0.04

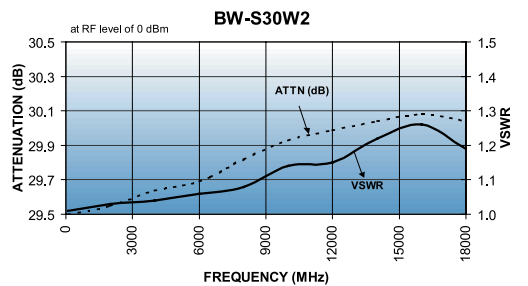


FREQUENCY (MHz)
100.00
2000.00
4000.00
6000.00
8000.00
10000.00
12000.00
14000.00
16000.00
18000.00

ATTENUATION	
$\bar{X}$ (dB)	$\sigma$ (dB)
19.57	0.06
19.64	0.07
19.67	0.08
19.71	0.09
19.80	0.13
19.81	0.14
19.81	0.16
20.06	0.26
20.17	0.29
20.30	0.32

DC to 18000 MHz  
VSWR

$\bar{X}$	$\sigma$
1.01	0.00
1.01	0.00
1.02	0.00
1.03	0.00
1.05	0.01
1.06	0.01
1.05	0.01
1.06	0.00
1.10	0.00
1.11	0.01



FREQUENCY (MHz)
100.00
2000.00
4000.00
6000.00
8000.00
10000.00
12000.00
14000.00
16000.00
18000.00

ATTENUATION	
$\bar{X}$ (dB)	$\sigma$ (dB)
29.50	0.08
29.55	0.02
29.64	0.03
29.69	0.04
29.82	0.11
29.93	0.17
29.99	0.22
30.04	0.33
30.08	0.41
30.04	0.49

DC to 18000 MHz  
VSWR

$\bar{X}$	$\sigma$
1.01	0.00
1.03	0.00
1.04	0.00
1.06	0.01
1.08	0.02
1.14	0.02
1.15	0.02
1.22	0.03
1.26	0.03
1.19	0.05

# PRECISION FIXED ATTENUATORS 50Ω SMA

**5W** 1 to 40 dB, DC to 18 GHz



BW-SXW5

MODEL NO.	FREQ. RANGE GHz $f_l$ - $f_u$	ATTENUATION dB		VSWR (:1) Max.			POWER W**	CASE STYLE Note B	PRICE \$ Qty. (1-49)
		Nom.	ACCURACY*	<u>L</u>	<u>M</u>	<u>U</u>			
BW-S1W5	DC-18	1	±0.40	1.20	1.25	1.30	5	DC737	44.95
BW-S2W5	DC-18	2	±0.40	1.20	1.25	1.30	5	DC737	44.95
BW-S3W5	DC-18	3	±0.40	1.20	1.25	1.30	5	DC737	44.95
BW-S4W5	DC-18	4	±0.40	1.20	1.25	1.30	5	DC737	44.95
BW-S5W5	DC-18	5	±0.40	1.20	1.25	1.30	5	DC737	44.95
BW-S6W5	DC-18	6	±0.40	1.20	1.25	1.30	5	DC737	44.95
BW-S7W5	DC-18	7	±0.60	1.20	1.25	1.30	5	DC737	44.95
BW-S8W5	DC-18	8	±0.60	1.20	1.25	1.30	5	DC737	44.95
BW-S9W5	DC-18	9	±0.60	1.20	1.25	1.30	5	DC737	44.95
BW-S10W5	DC-18	10	±0.60	1.20	1.25	1.30	5	DC737	44.95
BW-S12W5	DC-18	12	±0.60	1.20	1.25	1.30	5	DC737	44.95
BW-S15W5	DC-18	15	±0.60	1.20	1.25	1.30	5	DC737	44.95
BW-S20W5	DC-18	20	±0.60	1.20	1.25	1.30	5	DC737	44.95
BW-S30W5	DC-18	30	±0.85	1.20	1.25	1.30	5	DC737	44.95
BW-S40W5	DC-18	40	±0.85	1.20	1.25	1.30	5	DC737	44.95

L = DC-4 GHz

M = 4-8 GHz

U = 8-12.4 GHz

**NOTES:**

- \* At 25°C includes power & frequency variations up to 12.4 GHz. Above 12.4 GHz add 0.5 dB typ. to accuracy and 0.3 typ. to VSWR in the U range. Temperature coefficient for attenuation .0004 dB/dB/°C typ.
- \*\* Average power at 25°C ambient, derate linearly to 2 W at 100°C. Peak Power 125W max., 5µsec pulse width, 100 Hz PRF.
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in General Information (Section 0).
- B. Connector types and case mounted options, case finishes are given in section 0, see "Case styles & outline drawings".
- C. Prices and specifications subject to change without notice.

designers kits available

KIT No.	No. of Units in KIT	Description	Price \$ per KIT
K5-BW1	8	1 of each: 1,2,3,4,5,6,8,10	299.00

# Coaxial, 50Ω, N



BW-NXW5

MODEL NO.	FREQ. RANGE GHz $f_l$ - $f_u$	ATTENUATION dB		VSWR (:1) Max.			POWER W**	CASE STYLE Note B	PRICE \$ Qty. (1-49)
		Nom.	ACCURACY*	$L$	$M$	$U$			
BW-N1W5	DC-18	1	±0.40	1.20	1.25	1.30	5	DC736	54.95
BW-N2W5	DC-18	2	±0.40	1.20	1.25	1.30	5	DC736	54.95
BW-N3W5	DC-18	3	±0.40	1.20	1.25	1.30	5	DC736	54.95
BW-N4W5	DC-18	4	±0.40	1.20	1.25	1.30	5	DC736	54.95
BW-N5W5	DC-18	5	±0.40	1.20	1.25	1.30	5	DC736	54.95
BW-N6W5	DC-18	6	±0.40	1.20	1.25	1.30	5	DC736	54.95
BW-N7W5	DC-18	7	±0.60	1.20	1.25	1.30	5	DC736	54.95
BW-N8W5	DC-18	8	±0.60	1.20	1.25	1.30	5	DC736	54.95
BW-N9W5	DC-18	9	±0.60	1.20	1.25	1.30	5	DC736	54.95
BW-N10W5	DC-18	10	±0.60	1.20	1.25	1.30	5	DC736	54.95
BW-N12W5	DC-18	12	±0.60	1.20	1.25	1.30	5	DC736	54.95
BW-N15W5	DC-18	15	±0.60	1.20	1.25	1.30	5	DC736	54.95
BW-N20W5	DC-18	20	±0.60	1.20	1.25	1.30	5	DC736	54.95
BW-N30W5	DC-18	30	±0.85	1.20	1.25	1.30	5	DC736	54.95
BW-N40W5	DC-18	40	±0.85	1.20	1.25	1.30	5	DC736	54.95

$L$  = DC-4 GHz

$M$  = 4-8 GHz

$U$  = 8-12.4 GHz

## features

- DC to 18 GHz
- precision attenuation
- excellent VSWR, 1.2:1 typ.
- high temperature stability
- stainless steel male and female connectors

## applications

- matching
- instrumentation
- test set-ups