ADAPTENUATORS *Attenuators, between different series connectors*

DC to 2 GHz 3, 6, 10, 20 dB 50 Ω

SF-BM Case DJ870 | SM-BM Case DJ869 | SF-BF Case DJ872 | SM-BF Case DJ871

MODEL PREFIX	CONNECTOR TYPE		FREQ. RANGE (MHz)	ATTENUATION (dB)								VSWR (:1)						INPUT POWER (W)
					Flatness													
					L			M		U		L		M		U		
	CONNECTOR 1	CONNECTOR 2	f_L-f_U	Nom.	Typ.	Max.	Typ.	Max.	Typ.	Max.		Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.
SMA to BNC Connectors																		
SF-BM-3	SMA-Female	BNC-Male	DC-2000	3±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SF-BM-6	SMA-Female	BNC-Male	DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SF-BM-10	SMA-Female	BNC-Male	DC-2000	10±0.3	0.05	0.15	0.10	0.15	0.10	0.20		1.1	1.2	1.1	1.3	1.2	1.25	0.5
SM-BM-3	SMA-Male	BNC-Male	DC-2000	3±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SM-BM-6	SMA-Male	BNC-Male	DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SM-BM-10	SMA-Male	BNC-Male	DC-2000	10±0.3	0.05	0.10	0.10	0.15	0.10	0.20		1.1	1.2	1.1	1.3	1.2	1.25	0.5
SF-BF-3	SMA-Female	BNC-Female	DC-2000	3±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SF-BF-6	SMA-Female	BNC-Female	DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SF-BF-10	SMA-Female	BNC-Female	DC-2000	10±0.3	0.05	0.10	0.10	0.15	0.10	0.20		1.1	1.2	1.1	1.3	1.2	1.25	0.5
SM-BF-3	SMA-Male	BNC-Female	DC-2000	3±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SM-BF-6	SMA-Male	BNC-Female	DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
SM-BF-10	SMA-Male	BNC-Female	DC-2000	10±0.3	0.05	0.15	0.10	0.15	0.10	0.20		1.1	1.2	1.1	1.3	1.2	1.25	0.5

Case DJ867 | Case DJ865 | Case DJ868 | Case DJ866 | NM-SF Case DJ1208

TYPE-N to BNC Connectors

NF-BM-3	N-Female	BNC-Male	DC-2000	3±0.3	0.05	0.15	0.10	0.25	0.17	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
NF-BM-6	N-Female	BNC-Male	DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
NF-BM-10	N-Female	BNC-Male	DC-2000	10±0.3	0.05	0.15	0.10	0.25	0.15	0.30		1.1	1.2	1.1	1.3	1.2	1.25	0.5
NM-BM-3	N-Male	BNC-Male	DC-2000	3±0.3	0.10	0.20	0.20	0.25	0.20	0.30		1.1	1.2	1.1	1.2	1.2	1.30	0.5
NM-BM-6	N-Male	BNC-Male	DC-2000	6±0.3	0.05	0.15	0.15	0.25	0.20	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
NM-BM-10	N-Male	BNC-Male	DC-2000	10±0.3	0.05	0.15	0.15	0.25	0.20	0.25		1.1	1.2	1.1	1.3	1.2	1.25	0.5
NF-BF-3	N-Female	BNC-Female	DC-2000	3±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
NF-BF-6	N-Female	BNC-Female	DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
NF-BF-10	N-Female	BNC-Female	DC-2000	10±0.3	0.05	0.15	0.10	0.15	0.10	0.20		1.1	1.2	1.1	1.3	1.2	1.25	0.5
NM-BF-3	N-Male	BNC-Female	DC-2000	3±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
NM-BF-6	N-Male	BNC-Female	DC-2000	6±0.3	0.05	0.15	0.10	0.20	0.15	0.25		1.1	1.2	1.1	1.2	1.2	1.25	0.5
NM-BF-10	N-Male	BNC-Female	DC-2000	10±0.3	0.05	0.15	0.15	0.25	0.20	0.30		1.1	1.2	1.1	1.2	1.2	1.25	0.5

TYPE-N to SMA Connectors

NM-SF-20	N-Male	SMA-Female	DC-3000	20±0.3	0.05	0.15	0.10	0.30	0.60	1.0		1.01	1.20	1.04	1.20	1.09	1.25	0.5

L = low range (DC to 500 MHz) M = mid range (DC to 1000 MHz) U = upper range (DC to f_U MHz)

What is an Adaptenuator? *Our new line of Adaptenuators is simply an attenuator with different connector types at the input and output. The benefits of using Mini-Circuits Adaptenuators are, improved interface matching and eliminating the hassle of working with, misplacing and stocking all different types of adapters to fit your attenuators. Based on the* ***attenuation*** *value you require you can now order the attenuator you need with the* ***connectors*** *you need. These are the new Adaptenuators from Mini-Circuits, designed with an ultra wideband frequency response, usable to 4 GHz with a super flat frequency response. Durably built with solid unibody construction.*

ATTENUATORS, ELECTRONIC

3.5 dB to 40 dB **50 Ω**


ZX73-M
Case GD1163


ZX73
Case GD958


ZFAT
Case SSS173


ZSAT
Case AR214


ZX76
Case HK1149, HK1172

MODEL PREFIX	FREQUENCY RANGE (MHz) Min.	Max.	INSERTION LOSS (dB) @ 15 V control voltage Typ.	Max.	ATTENUATION (dB) @ 0 V control voltage Typ.	Min.	IP3 (dBm) Typ.	RETURN LOSS (dB) Typ.	POWER SUPPLY Voltage (V)	Current (mA) Max.	CONTROL Voltage (V)	Current (mA) Max.
VOLTAGE VARIABLE *10 MHz to 2500 MHz*												
ZX73-2500M	10	2500	3.3	6.2	40	25	+43	20	+3 to +5	5	0-17	30
ZX73-2500	10	2500	3.3	6.2	40	25	+43	20	+3 to +5	5	0-17	30

MODEL PREFIX	FREQUENCY (MHz) f_L	f_U	PRIMARY ATTENUATION STEPS (dB) @TTL CONTROL PORT #1	#2	#3	ATTENUATION Typ. (dB) Attenuation Above insertion loss at (1,1,1) state	Max. Insertion loss at (0,0,0) state	VSWR (:1) Max. L	M	U
DIGITAL STEP *PIN DIODE 10 MHZ TO 1000 MHz*										
ZFAT-R512	10	1000	0.5±0.18	1±0.25	2±0.25	3.5	4.0	1.6	1.4	1.5
ZFAT-124	10	1000	1±0.25	2±0.25	4±0.3	7.0	4.0	1.6	1.4	1.5
ZFAT-3610	10	1000	3±0.3	6±0.4	10±0.4	19.0	4.0	1.6	1.4	1.5
ZFAT-4816	10	1000	4±0.4	8±0.4	16±0.5	28.0	4.0	1.6	1.4	1.5
ZFAT-51020	10	1000	5±0.4	10±0.4	20±0.5	35.0	4.0	1.6	1.4	1.5
			SIX CONTROL PORTS			LOGIC STATE (1,1,1,1,1,1)	(0,0,0,0,0,0)			
ZSAT-31R5	10	1000	(1) 0.5±0.18 (4) 4±0.3	(2) 1±0.25 (5) 8±0.4	(3) 2±0.25 (6)16±0.5	31.5	7.0	2.0	1.5	1.6

L = low range (10 to 100 MHz) M = mid range (100 to 500 MHz) U = upper range (500 to 1000 MHz)

MODEL PREFIX	FREQUENCY RANGE (MHz)	TOTAL STEP ATTENUATION (dB) Typ.	LOWEST ATTENUATION STEP (dB) Typ.	INPUT IP3 (dBm) Typ.	SINGLE POWER SUPPLY Typ. (V_{DD})	DUAL POWER SUPPLY Typ. (V_{DD}, V_{SS})	SWITCHING SPEED (µSec.) Typ.	INPUT PWR. @ 0.2 dB COMPRESSION Typ. dBm	CONTROL INTERFACE	No. OF BITS
DIGITAL STEP *CMOS DC-2400 MHz*										
ZX76-31R5-PN	DC-2400	31.5	0.5	+52	—	+3 V, -3 V	1.0	+24	Parallel	6
ZX76-31R5-PP	DC-2400	31.5	0.5	+52	+3 V	— —	1.0	+24	Parallel	6
ZX76-31R5-SN	DC-2400	31.5	0.5	+52	—	+3 V, -3 V	1.0	+24	Serial	6
ZX76-31R5-SP	DC-2400	31.5	0.5	+52	+3 V	— —	1.0	+24	Serial	6
ZX76-31-PN	DC-2400	31.0	1.0	+52	—	+3 V, -3 V	1.0	+24	Parallel	5
ZX76-31-PP	DC-2400	31.0	1.0	+52	+3 V	— —	1.0	+24	Parallel	5
ZX76-31-SN	DC-2400	31.0	1.0	+52	—	+3 V, -3 V	1.0	+24	Serial	5
ZX76-31-SP	DC-2400	31.0	1.0	+52	+3 V	— —	1.0	+24	Serial	5
ZX76-15R5-PN	DC-4000	15.5	0.5	+52	—	+3 V, -3 V	1.0	+24	Parallel	5
ZX76-15R5-PP	DC-4000	15.5	0.5	+52	+3 V	— —	1.0	+24	Parallel	5
ZX76-15R5-SN	DC-4000	15.5	0.5	+52	—	+3 V, -3 V	1.0	+24	Serial	5
ZX76-15R5-SP	DC-4000	15.5	0.5	+52	+3 V	— —	1.0	+24	Serial	5

ATTENUATORS, FIXED

DC to 6 GHz, 1 dB to 30 dB
General Response /DC Passing

VAT Case FF704
SMA

VAT Case DC1066
SMA (2W)

UNAT Case FF779
Type N

MODEL PREFIX	FREQ. RANGE (MHz) f_L-f_U	ATTENUATION (dB) Nom.	FLATNESS L Typ.	FLATNESS M Typ.	FLATNESS U Typ.	Total Band Typ.	VSWR (:1) TYP. L Typ.	VSWR (:1) TYP. M Typ.	VSWR (:1) TYP. U Typ.	INPUT POWER (W) Max.
SMA (VAT) 0.5 W 1 W 50 Ω										
VAT-1	DC-6000	1±0.3	0.20	0.20	0.20	0.60	1.05	1.10	1.40	1.0
VAT-2	DC-6000	2±0.3	0.20	0.20	0.25	0.65	1.05	1.20	1.50	1.0
VAT-3	DC-6000	3±0.3	0.20	0.15	0.15	0.45	1.05	1.15	1.40	1.0
VAT-4	DC-6000	4±0.3	0.20	0.15	0.20	0.55	1.05	1.15	1.45	1.0
VAT-5	DC-6000	5±0.3	0.10	0.10	0.10	0.25	1.05	1.15	1.40	1.0
VAT-6	DC-6000	6±0.3	0.15	0.10	0.20	0.45	1.05	1.15	1.50	1.0
VAT-7	DC-6000	7±0.3	0.10	0.10	0.10	0.10	1.05	1.15	1.40	1.0
VAT-8	DC-6000	8±0.3	0.10	0.10	0.15	0.20	1.05	1.20	1.60	1.0
VAT-9	DC-6000	9±0.3	0.10	0.10	0.10	0.10	1.05	1.15	1.60	1.0
VAT-10	DC-6000	10±0.3	0.10	0.20	0.15	0.35	1.05	1.20	1.90	1.0
VAT-12	DC-6000	12±0.3	0.10	0.10	0.10	0.30	1.05	1.20	1.65	1.0
VAT-15	DC-6000	15±0.3	0.20	0.30	0.30	0.80	1.05	1.40	1.75	1.0
VAT-20	DC-6000	20±0.3	0.45	0.55	0.35	0.85	1.05	1.20	1.30	0.5
VAT-30	DC-6000	30±0.3	1.10	0.70	0.35	1.30	1.05	1.15	1.25	0.5
SMA (VAT) 2 W 50 Ω										
VAT-1W2	DC-6000	1±0.3	0.20	0.20	0.20	0.60	1.10	1.30	1.55	2.0
VAT-2W2	DC-6000	2±0.3	0.20	0.20	0.25	0.65	1.10	1.30	1.50	2.0
VAT-3W2	DC-6000	3±0.3	0.20	0.15	0.15	0.45	1.05	1.30	1.45	2.0
VAT-4W2	DC-6000	4±0.3	0.20	0.15	0.20	0.55	1.05	1.30	1.50	2.0
VAT-5W2	DC-6000	5±0.3	0.20	0.10	0.15	0.35	1.10	1.40	1.65	2.0
VAT-6W2	DC-6000	6±0.3	0.20	0.10	0.20	0.45	1.10	1.30	1.50	2.0
VAT-7W2	DC-6000	7±0.3	0.25	0.15	0.10	0.45	1.10	1.25	1.40	2.0
VAT-8W2	DC-6000	8±0.3	0.15	0.10	0.15	0.25	1.10	1.25	1.60	2.0
VAT-9W2	DC-6000	9±0.3	0.15	0.10	0.10	0.15	1.10	1.15	1.50	2.0
VAT-10W2	DC-6000	10±0.3	0.10	0.20	0.15	0.35	1.15	1.35	1.60	2.0
VAT-12W2	DC-6000	12±0.3	0.10	0.15	0.10	0.30	1.20	1.50	1.70	2.0
VAT-15W2	DC-6000	15±0.3	0.20	0.30	0.30	0.80	1.30	1.60	1.75	2.0
VAT-20W2	DC-6000	20±0.3	0.50	0.45	0.20	1.05	1.35	1.70	1.95	2.0
VAT-30W2	DC-6000	30±0.3	0.70	0.45	0.20	1.30	1.25	1.45	1.60	2.0

VAT Models: L = low range (DC to 3000 MHz) M = mid range (3000 to 5000 MHz) U = upper range (5000 to 6000 MHz)

MODEL PREFIX	FREQ. RANGE (MHz) f_L-f_U	ATTENUATION (dB) Nom.	FLATNESS L Typ.	FLATNESS M Typ.	FLATNESS U Typ.	Total Band Typ.	VSWR (:1) TYP. L Typ.	VSWR (:1) TYP. M Typ.	VSWR (:1) TYP. U Typ.	INPUT POWER (W) Max.
TYPE-N (UNAT) 0.5 W 1 W 50 Ω										
UNAT-1	DC-6000	1±0.3	0.20	0.15	0.10	0.45	1.10	1.40	1.0	1.0
UNAT-2	DC-6000	2±0.3	0.20	0.25	0.15	0.50	1.07	1.22	1.50	1.0
UNAT-3	DC-6000	3±0.3	0.20	0.10	0.10	0.35	1.05	1.22	1.50	1.0
UNAT-4	DC-6000	4±0.3	0.15	0.15	0.10	0.40	1.05	1.10	1.50	1.0
UNAT-5	DC-6000	5±0.3	0.15	0.15	0.10	0.35	1.05	1.10	1.50	1.0
UNAT-6	DC-6000	6±0.3	0.15	0.15	0.15	0.40	1.05	1.20	1.50	1.0
UNAT-7	DC-6000	7±0.3	0.10	0.10	0.15	0.20	1.05	1.10	1.50	1.0
UNAT-8	DC-6000	8±0.3	0.10	0.10	0.10	0.10	1.05	1.10	1.50	1.0
UNAT-9	DC-6000	9±0.3	0.15	0.10	0.10	0.15	1.05	1.10	1.50	1.0
UNAT-10	DC-6000	10±0.3	0.10	0.20	0.20	0.40	1.15	1.20	1.50	1.0
UNAT-12	DC-6000	12±0.3	0.15	0.20	0.15	0.35	1.15	1.20	1.80	1.0
UNAT-15	DC-6000	15±0.3	0.20	0.35	0.20	0.60	1.15	1.20	1.70	1.0
UNAT-20	DC-6000	20±0.3	0.45	0.45	0.40	0.75	1.15	1.20	1.30	0.5
UNAT-30	DC-6000	30±0.3	1.20	0.70	0.40	2.30	1.04	1.07	1.10	0.5

UNAT Models: L = low range (DC to 3000 MHz) M = mid range (3000 to 4500 MHz) U = upper range (4500 to 6000 MHz)

HAT Case FF747
BNC

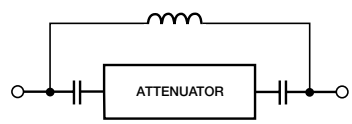
NAT Case FF57
Type N

MODEL PREFIX	FREQ. RANGE (MHz) f_L-f_U	ATTENUATION (dB) Nom.	FLATNESS L Typ.	FLATNESS M Typ.	FLATNESS U Typ.	Total Band Typ.	VSWR (:1) TYP. L Typ.	VSWR (:1) TYP. M Typ.	VSWR (:1) TYP. U Typ.	INPUT POWER (W) Max.
BNC (HAT) 0.5 W 1 W 50 Ω						Max.				
HAT-1	DC-2000	1±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-2	DC-2000	2±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-3	DC-2000	3±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-4	DC-2000	4±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-5	DC-2000	5±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-6	DC-2000	6±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-7	DC-2000	7±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-8	DC-2000	8±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-9	DC-2000	9±0.2	0.05	0.10	0.15	0.25	1.05	1.10	1.10	1.0
HAT-10	DC-2000	10±0.2	0.05	0.10	0.10	0.25	1.05	1.10	1.10	1.0
HAT-12	DC-2000	12±0.2	0.05	0.10	0.10	0.25	1.05	1.10	1.15	1.0
HAT-15	DC-2000	15±0.2	0.05	0.10	0.20	0.30	1.05	1.10	1.15	1.0
HAT-20	DC-2000	20±0.2	0.05	0.15	0.25	0.40	1.05	1.10	1.15	0.5
HAT-30	DC-2000	30±0.2	0.30	0.60	0.80	1.30	1.05	1.10	1.15	1.0
BNC (HAT) 0.5 W 75 Ω										
HAT-3-75	DC-2000	3±0.2	0.05	0.10	0.15	0.30	1.05	1.15	1.22	0.5
HAT-6-75	DC-2000	6±0.2	0.05	0.10	0.15	0.3	1.03	1.05	1.15	0.5
HAT-10-75	DC-2000	10±0.2	0.05	0.05	0.05	0.15	1.03	1.04	1.10	0.5
HAT-15-75	DC-2000	15±0.2	0.05	0.05	0.05	0.15	1.03	1.04	1.10	0.5
HAT-20-75	DC-2000	20±0.2	0.05	0.05	0.05	0.15	1.03	1.04	1.10	0.5

HAT Models: L = low range (DC to 500 MHz) M = mid range (DC to 1000 MHz) U = upper range (DC to 2000 MHz)

MODEL PREFIX	FREQUENCY (MHz)	ATTENUATION (dB) Nom.	ATTENUATION (dB) Flatness, Max.	VSWR (:1) Max.	POWER (mW) Max.	DC CURRENT (AMPS) Max.	DC BREAKDOWN (Volts) Max.
TYPE-N (NAT) DC Passing 50 Ω							
NAT-3DC	200-2500	3±0.5	±0.8	1.25	500	1	60
NAT-6DC	200-2500	6±0.5	±0.8	1.40	375	1	60
NAT-10DC	200-2500	10±0.3	±1.0	1.60	600	4	125
NAT-20DC	500-2300	20±0.5	±1.2	1.80	400	4	125
NAT-3DC-1A	650-3500	3±0.5	±0.7	1.6	1000	1	50
NAT-3DC-2A	1000-3500	3±0.5	±0.8	1.7	1000	2	50
NAT-3DC-3A	1700-3300	3±0.7	±0.7	1.6	1000	3	50
NAT-6DC-1A	600-4000	6±0.7	±0.8	1.7	1000	1	50
NAT-6DC-2A	1000-3750	6±0.7	±0.8	1.6	1000	2	50
NAT-6DC-3A	1700-3500	6±0.5	±0.8	1.5	1000	3	50
NAT-10DC-1A	600-4000	10±0.6	±0.6	1.6	1000	1	50
NAT-10DC-1.5A	1000-4000	10±0.5	±0.6	1.6	1000	1.5	50
NAT-10DC-2.5A	1700-4000	10±0.5	±0.6	1.6	1000	2.5	50
NAT-15DC-1A	650-4000	15±0.7	±0.8	1.7	1000	1	50
NAT-15DC-1.5A	950-4000	15±0.7	±0.6	1.6	1000	1.5	50
NAT-15DC-2.5A	1700-4000	15±0.8	±0.6	1.5	1000	2.5	50

ELECTRICAL SCHEMATIC DC PASSING



ATTENUATORS, FIXED PRECISION

50 Ω

DC to 18 GHz, 1 to 40 dB

BW-SW2 Case FF658/FF659
SMA, 2 W

BW-S50W2 Case FF1048
SMA, 2 W

BW-SW5 Case DC737
SMA, 5 W

BW-NW5 Case DC736
Type N, 5 W

BW-40N100W Case GH986
Type N, 100 W

MODEL PREFIX	FREQUENCY RANGE (MHz) f_L-f_U	ATTENUATION (dB) Nominal	Accuracy	VSWR (:1) Max. L	M	U
SMA 2 W						
BW-S1W2	DC-18000	1	±0.40	1.20	1.25	1.30
BW-S2W2	DC-18000	2	±0.40	1.20	1.25	1.30
BW-S3W2	DC-18000	3	±0.40	1.20	1.25	1.30
BW-S4W2	DC-18000	4	±0.40	1.20	1.25	1.30
BW-S5W2	DC-18000	5	±0.40	1.20	1.25	1.30
BW-S6W2	DC-18000	6	±0.40	1.20	1.25	1.30
BW-S7W2	DC-18000	7	-0.4, +0.9	1.20	1.25	1.30
BW-S8W2	DC-18000	8	±0.60	1.20	1.25	1.30
BW-S9W2	DC-18000	9	-0.4, +0.8	1.20	1.25	1.30
BW-S10W2	DC-18000	10	±0.60	1.20	1.25	1.30
BW-S12W2	DC-18000	12	±0.60	1.20	1.25	1.30
BW-S15W2	DC-18000	15	±0.60	1.20	1.25	1.30
BW-S20W2	DC-18000	20	-0.5, +0.8	1.20	1.25	1.30
BW-S30W2	DC-18000	30	±0.85	1.20	1.25	1.30
BW-S40W2	DC-18000	40	-1.0, +1.5	1.20	1.25	1.30
BW-S50W2	DC-18000	50	±0.1.5	1.15	1.20	1.25
SMA 5 W						
BW-S1W5	DC-18000	1	±0.40	1.20	1.25	1.30
BW-S2W5	DC-18000	2	±0.40	1.20	1.25	1.30
BW-S3W5	DC-18000	3	±0.40	1.20	1.25	1.30
BW-S4W5	DC-18000	4	±0.40	1.20	1.25	1.30
BW-S5W5	DC-18000	5	±0.40	1.20	1.25	1.30
BW-S6W5	DC-18000	6	±0.40	1.20	1.25	1.30
BW-S7W5	DC-18000	7	-0.4, +0.9	1.20	1.25	1.30
BW-S8W5	DC-18000	8	±0.60	1.20	1.25	1.30
BW-S9W5	DC-18000	9	-0.4, +0.8	1.20	1.25	1.30
BW-S10W5	DC-18000	10	±0.60	1.20	1.25	1.30
BW-S12W5	DC-18000	12	±0.60	1.20	1.25	1.30
BW-S15W5	DC-18000	15	±0.60	1.20	1.25	1.30
BW-S20W5	DC-18000	20	-0.5, +0.8	1.20	1.25	1.30
BW-S30W5	DC-18000	30	±0.85	1.20	1.25	1.30
BW-S40W5	DC-18000	40	-1.0, +7.5	1.20	1.25	1.30
TYPE-N 5 W						
BW-N1W5	DC-18000	1	±0.40	1.20	1.25	1.30
BW-N2W5	DC-18000	2	±0.40	1.20	1.25	1.30
BW-N3W5	DC-18000	3	±0.40	1.20	1.25	1.30
BW-N4W5	DC-18000	4	±0.40	1.20	1.25	1.30
BW-N5W5	DC-18000	5	±0.40	1.20	1.25	1.30
BW-N6W5	DC-18000	6	±0.40	1.20	1.25	1.30
BW-N7W5	DC-18000	7	-0.4, +0.9	1.20	1.25	1.30
BW-N8W5	DC-18000	8	±0.60	1.20	1.25	1.30
BW-N9W5	DC-18000	9	-0.4, +0.8	1.20	1.25	1.30
BW-N10W5	DC-18000	10	±0.60	1.20	1.25	1.30
BW-N12W5	DC-18000	12	±0.60	1.20	1.25	1.30
BW-N15W5	DC-18000	15	±0.60	1.20	1.25	1.30
BW-N20W5	DC-18000	20	-0.5, +0.8	1.20	1.25	1.30
BW-N30W5	DC-18000	30	±0.85	1.20	1.25	1.30
BW-N40W5	DC-18000	40	-1.0, +1.5	1.20	1.25	1.30

L = low range (DC to 4000 MHz) M = mid range (4000 to 8000 MHz) U = upper range (8000 to 12400 MHz)

TYPE-N 100 W

BW-40N100W	DC-4000	40	±1.6	1.15	1.35	1.40

L = low range (DC to 500 MHz) M = mid range (500 to 2000 MHz) U = upper range (2000 to 4000 MHz)