VBA-A·UBA-A Series

VBA-761A

UBA-641A

■ Product features and applications

The VBA-A/UBA-A series are push-button type ariable attenuators, covering up to DC-300 MHz (VBA-A) or DC-900 MHz (UBA-A) frequency. To meet the wide-ranging needs from research to experiment and signal adjustment, we offer several models with 4 to 8 push-buttons. Their lightweight and compact design makes them highly portable.

	Common Specifications	
	VBA-A	UBA-A
Frequency Range	DC～300MHz	DC～900MHz
Impedance	50Ω、75Ω	
VSWR	50Ω ･･･ 1.2(Max.) 75Ω ･･･ 1.3(Max.)	50Ω ･･･ 1.3(Max.) 75Ω ･･･ 1.5(Max.)
Power(Max.)	0.5W	
Connectors	50Ω…BNCJ、NJ 75Ω…BNCJ、FJ、NCJ	
Circuit Type	Unbalanced Type	
Switching Mode	Closed	
Operating Temperature Range	－10℃～＋65℃	

■ VBA/UBA series Standard Specifications

Models	Attenuation dB (Max.)	Step		Deviation dB (Max.)	Insertion Loss dB (Max.)		Length L(mm)	Weight
		Sections	Attenuation (dB)		50Ω	75Ω		
VBA-439A	39	4	3 6 10 20	±(2%+0.2)	0.5	0.5	81	(380g)
VBA-536A	36	5	1 2 3 15 15	±(2%+0.2)	0.5	0.5	95	(420g)
VBA-641A	41	6	1 2 3 5 10 20	±(2%+0.2)	0.5	0.7	109	(460g)
VBA-871A	71	8	1 2 3 5 10 10 20 20	±(2%+0.2)	0.9	0.9	137	(540g)
VBA-881A	81	8	1 2 3 5 10 20 20 20	±(2%+0.2)	0.9	0.9	137	(540g)
UBA-439A	39	4	3 6 10 20	±(2%+0.2)	0.8	1.3	81	(380g)
UBA-559A	59	5	3 6 10 20 20	±(2%+0.2)	1.0	1.5	95	(420g)
UBA-761A	61	7	1 2 3 5 10 20	±(2%+0.2)	1.8	2.2	123	(500g)

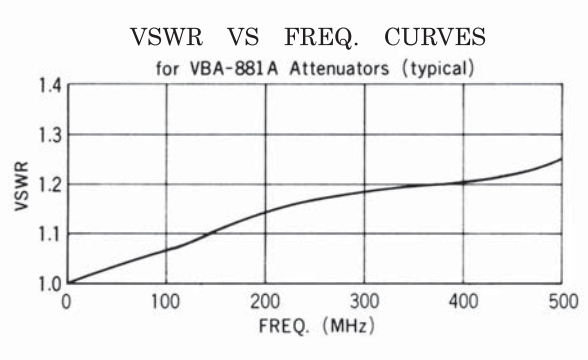
■ Model Description

VBA-641A-50-BNCJ

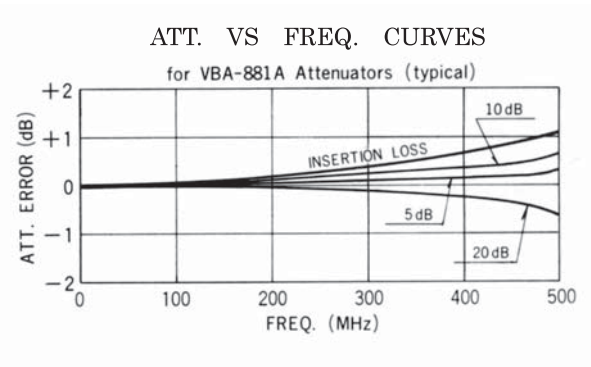
- Type (Refer To Standard Specifications)
- Impedance
  - 50 ; 50Ω
  - 75 ; 75Ω
- Connectors
  - 50Ω ; BNCJ, NJ
  - 75Ω ; BNCJ, FJ, NCJ

Frequency Characteristics

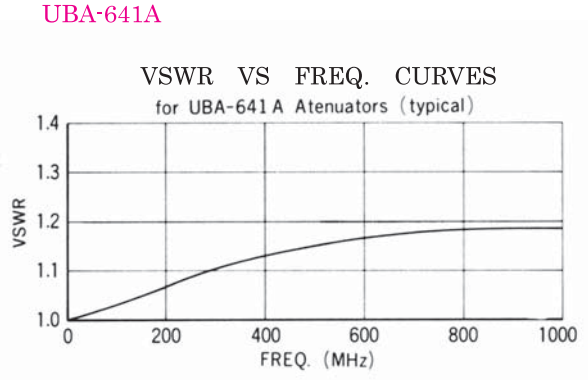
VBA-881A



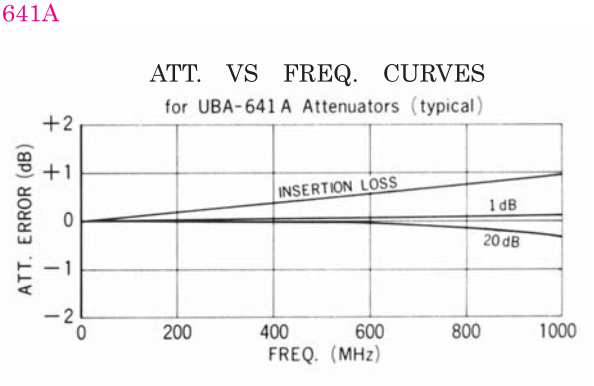
VBA-881A



UBA-641A

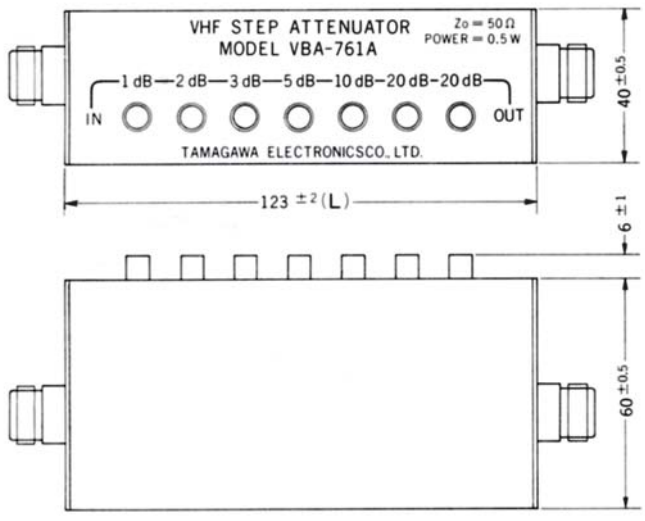


UBA-641A



Outline Drawings

VBA-761A



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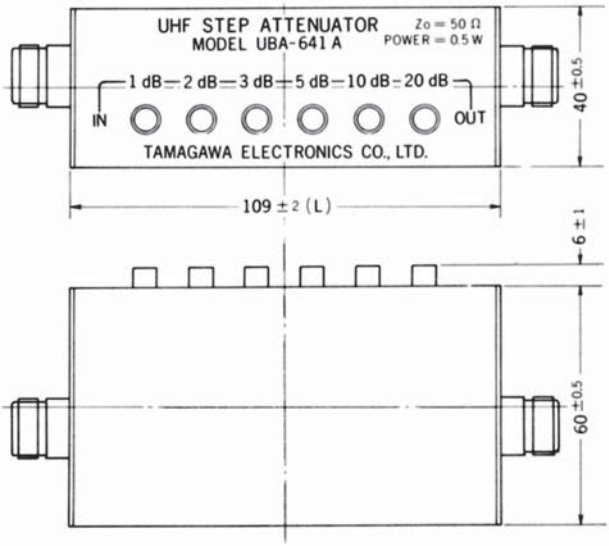

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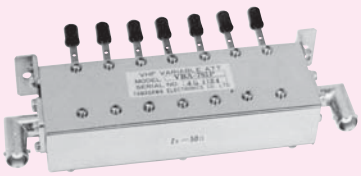
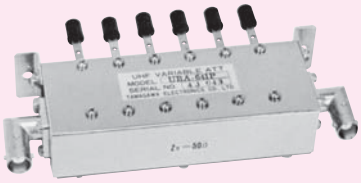
VBA-P·UBA-P Series

VBA-761P



UBA-641P



■ Product features and applications

The VBA-P/UBA-P series are push-button type variable attenuators to be embedded in panels. They support up to the DC-300 MHz (VBA-P) and DC -900 MHz (UBA-P) frequency range.
The compact and lightweight design with 4 to 8 push-buttons allows a wide range of application. Simply select the product to suit your purpose.

	Common Specifications	
	VBA-P	UBA-P
Frequency Range	DC～300MHz	DC～900MHz
Impedance	50Ω、75Ω	
VSWR	50Ω･･･1.2(Max.)　75Ω･･･1.3(Max.)	50Ω･･･1.3(Max.)　75Ω･･･1.5(Max.)
Power(Max.)	0.5W (Max.)	
Connectors	BNCJ－L	50Ω…BNCJ－L、75Ω…BNCJ
Circuit Type	Unbalanced Type	
Switching Mode	Closed	
Operating Temperature Range	－10℃～＋65℃	

■ VBA/UBA series Standard Specifications

Models	Attenuation dB (Max.)	Attenuation Steps		Deviation dB (Max.)	Insertion Loss dB (Max.)		Length L(mm)	Weight
		Sections	Attenuation(dB)		50Ω	75Ω		
VBA-439P	39	4	3 6 10 20	±(2%+0.2)	0.5	0.5	74	(240g)
VBA-641P	41	6	1 2 3 5 10 20	±(2%+0.2)	0.5	0.7	102	(300g)
VBA-762P	62	7	1 2 3 6 10 20 20	±(2%+0.2)	0.7	0.7	116	(310g)
VBA-881P	81	8	1 2 3 5 10 20 20 20	±(2%+0.2)	0.9	0.9	130	(350g)
UBA-411P	11	4	1 2 3 5	±(2%+0.2)	0.8	1.3	74	(240g)
UBA-439P	39	4	3 6 10 20	±(2%+0.2)	0.8	1.3	74	(240g)
UBA-641P	41	6	1 2 3 5 10 20	±(2%+0.2)	1.5	1.8	102	(300g)
UBA-762P	62	7	1 2 3 6 10 20 20	±(2%+0.2)	1.8	2.2	116	(310g)

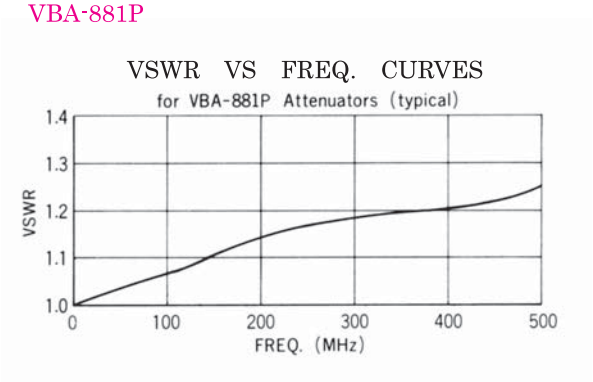
■ Model Description

VBA-641P-50-BNCLJ

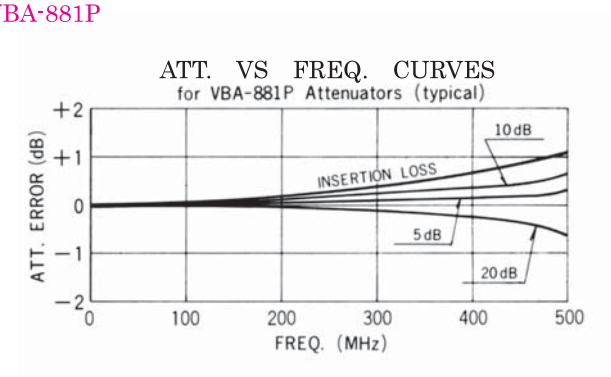
- Type (Refer To Standard Specifications)
- Impedance
  - 50 ; 50Ω
  - 75 ; 75Ω
- Connector
  - BNCLJ(Right angle)
  - BNCJ (only UBA 75Ω type)

Frequency Characteristics

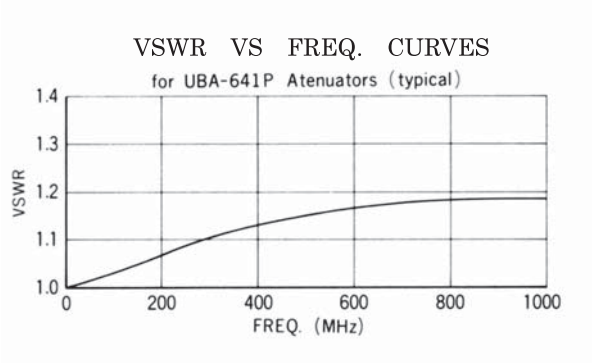
VBA-881P



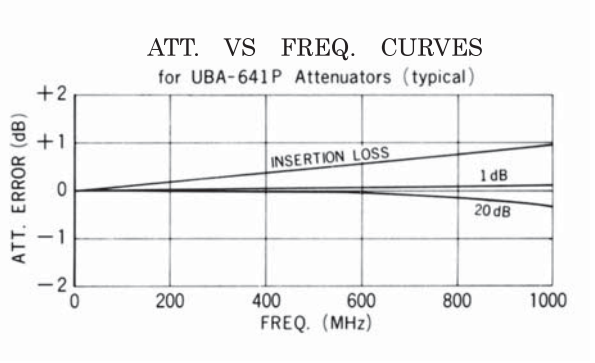
VBA-881P



UBA-641P

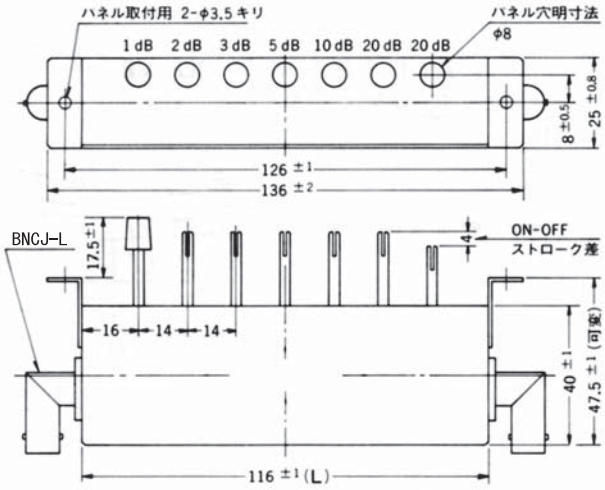


UBA-641P

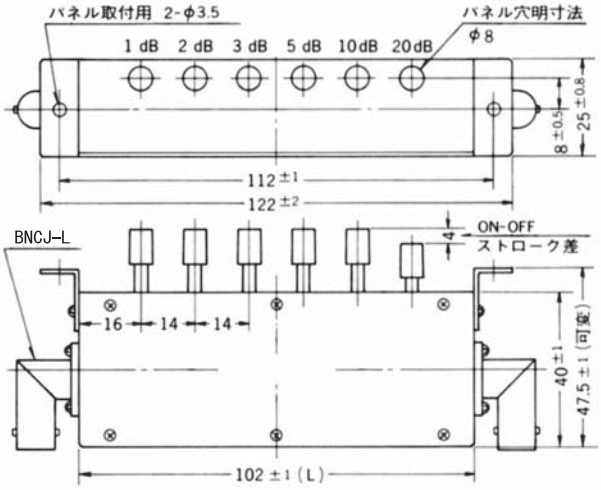


Outline Drawings

VBA-761P



UBA-641P



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UBA-C·D Series

Product features and applications

The UBA-C/UBA-D series are push-button type attenuators, covering up to the DC-2,000 MHz (UBA-C) and DC-2,200 MHz (UBA-D) frequency range. These compact and lightweight attenuators are equipped with newly-developed gold contacts which boast excellent environmental resistance such as corrosion resistance. They are ideal for inspections on TV production lines as well as R&D and level adjustment for wireless devices.

	Common Specifications	
	UBA-C	UBA-D
Frequency Range	DC～2000MHz	DC～2200MHz
Impedance	50Ω	
VSWR	1.5(Max.)	DC～1300MHz ･･･ 1.3(Max.) 1300MHz～2200MHz ･･･ 1.5(Max.)
Power(Max.)	1W (Max.)	
Connectors	NJ、SMAJ	NJ
Deviation	±(4%+0.4)dB(Max.)	DC～1300MHz ･･･ ±(2%+0.2)dB (Max.) 1300MHz～2200MHz ･･･ ±(4%+0.4)dB (Max.)
Insertion Loss	3.0dB (Max.)	DC～1300MHz ･･･ 1.8dB (Max.) 1300MHz～2200MHz ･･･ 3.0dB (Max.)
Circuit Type	Unbalanced Type	
Switching Mode	Closed	
Operating Temperature Range	−10℃～+65℃	−10℃～+50℃

UBA・C/D series Standard Specifications

	Models	Attenuation dB (Max.)	Attenuation Steps							Deviation dB (Max.)	Insertion loss dB (Max.)	Length L(mm)	Weight
			Sections	Attenuation(dB)									
	UBA-641C	41	6	1	2	3	5	10	20	±(4%+0.4)	3.0	109	(260g)
	UBA-761C	61	7	1	2	3	5	10	20	20	±(4%+0.4)	3.0	123	(310g)
NEW	UBA-641D	41	6	1	2	3	5	10	20		±(4%+0.4)	3.0	99	(260g)

Model Description

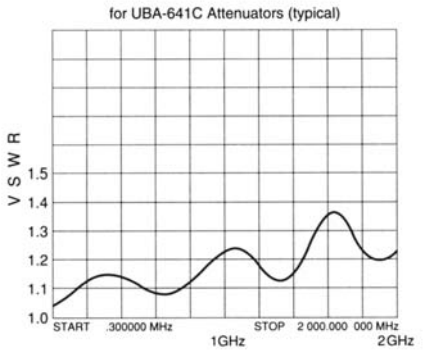
UBA-641C-50-SMAJ

- Type (Refer To Standard Specifications)
- Impedance
  - 50 ; 50Ω
  - 75 ; 75Ω (Special Specifications)
- Connector
  - NJ
  - SMAJ

Frequency Characteristics

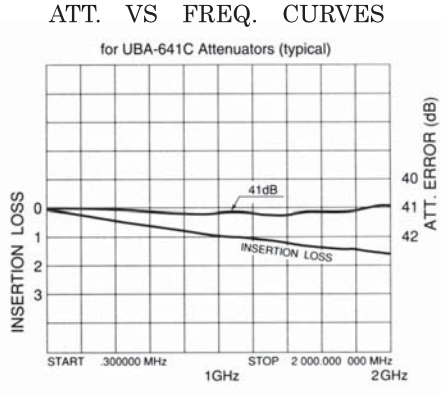
UBA-C

VSWR VS FREQ. CURVES



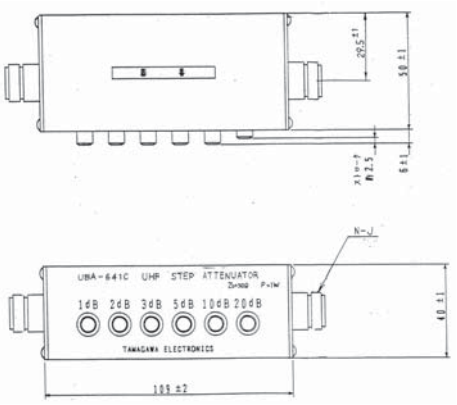
UBA-C

ATT. VS FREQ. CURVES

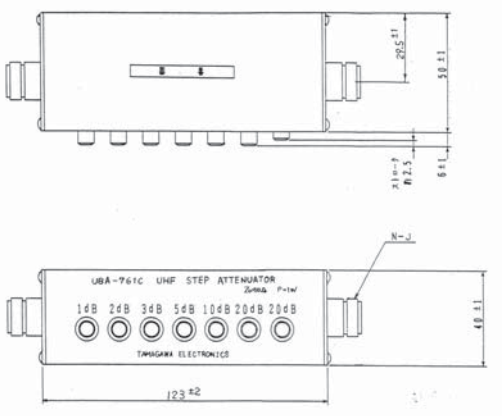


Outline Drawings

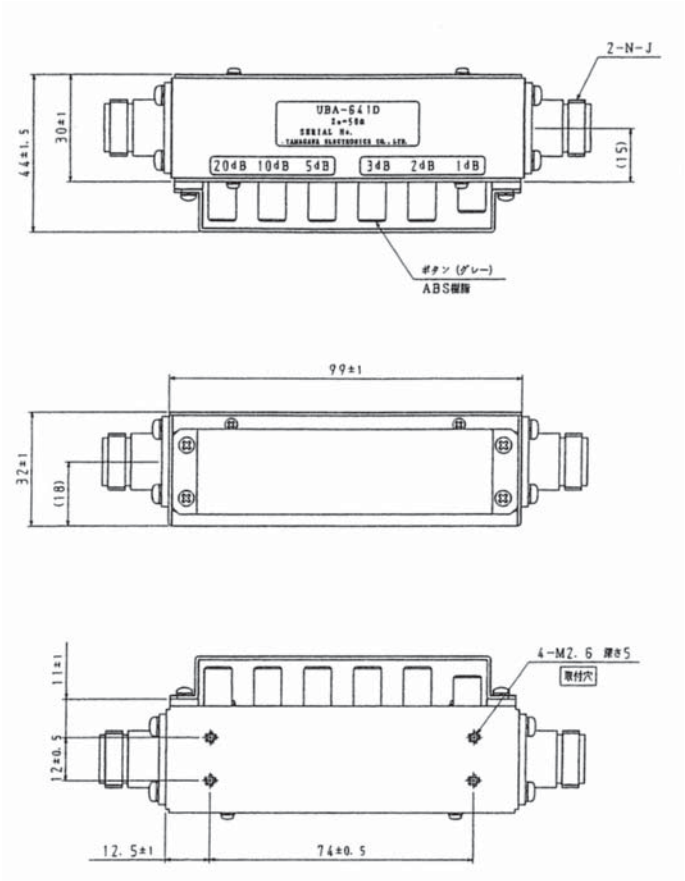
UBA-641C



UBA-761C



UBA-641D



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CVA Series

Product features and applications

The CVA series are continuous variable attenuators with no-contact RF circuit. 900 MHz - 15 GHz center frequency is supported for mobile communication systems. The attenuator is inserted in front of a power amplifier to allow the output power to be continuously adjusted. The no-electrical contact design enables a high power capacity of 1 to 5 W along with lower insertion loss.

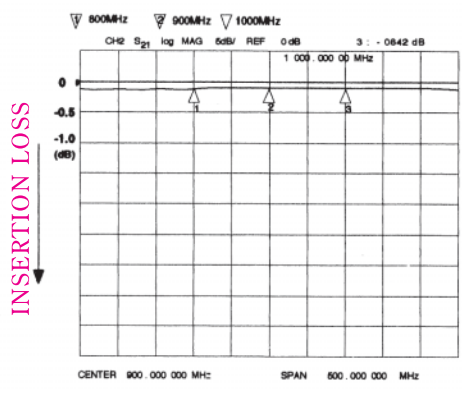
Standard Specifications

	Models	Frequency Range (MHz)	Insertion loss dB (Max.)	Attenuation (dB)	Impedance (Ω)	VSWR (Max.)	Power (Max.) (W)	Operating Temperature Range (℃)	Weight
	CVA-800-10	800～1000	0.2	0～6 6～10	50	1.3 1.5	5	−10～+50	(150g)
	CVA-1500-15	1400～1600	0.2	0～10 10～15	50	1.3 1.5	5	−10～+50	(150g)
NEW	CVA−010	1900～2200	0.3	0～8	50	1.2	1	−20～+60	(150g)
	CVA-2000-15	1920～2170	0.5	0～10 10～15	50	1.4 1.5	5	−20～+60	(150g)
	CVA-3400-20	3300～3500	0.3	0～20	50	1.3	1	−20～+60	(90g)
	CVA-4000-15	3500～4500	0.3	0～15	50	1.3	2	−20～+60	(120g)
NEW	CVA-011	4800～6000	0.5	0～15	50	1.4	1	−10～+65	(50g)
NEW	CVA-6000-30-1	13000～15000	0.5	0～20	50	1.5	1	−10～+60	(150g)
NEW	CVA-6000-30	14000～16000	0.5	0～30	50	1.5	1	−10～+60	(150g)

All models are SMA-J connectors.

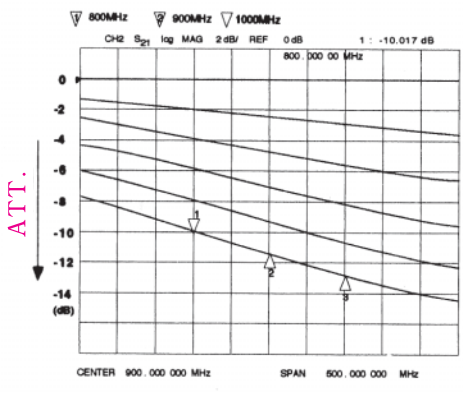
Frequency Characteristics

CVA-800-10



FREQ.(MHz)

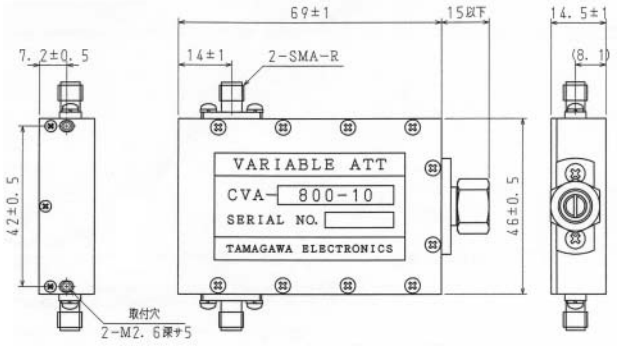
CVA-800-10



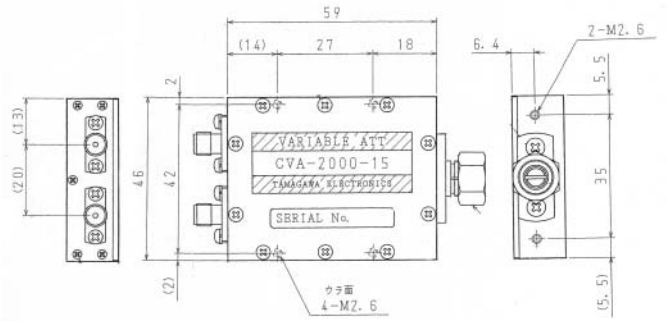
FREQ.(MHz)

Outline Drawings

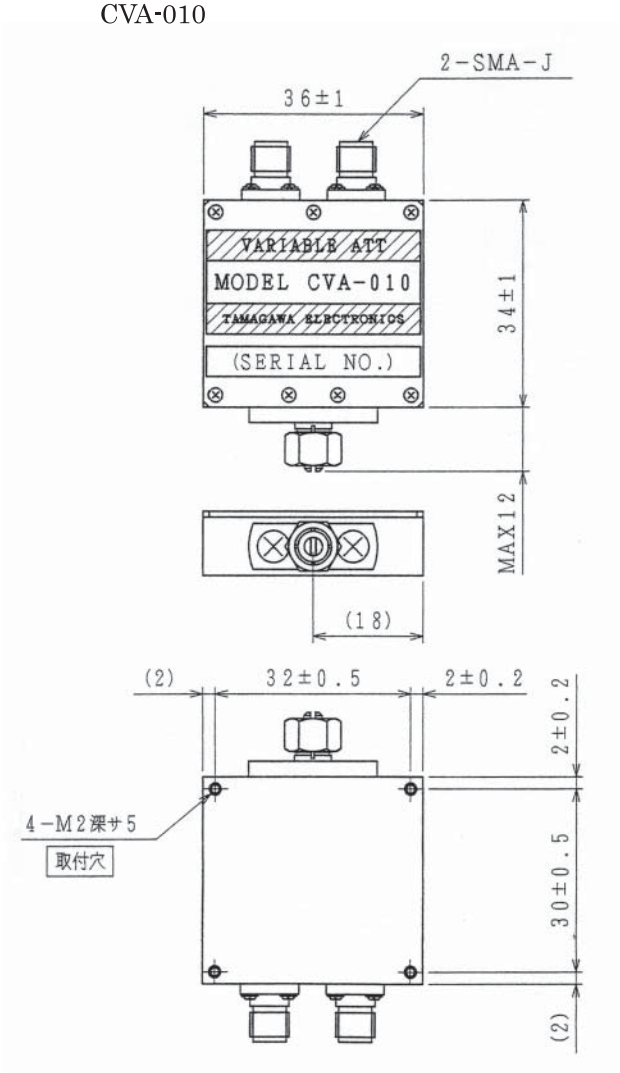
CVA-800-10



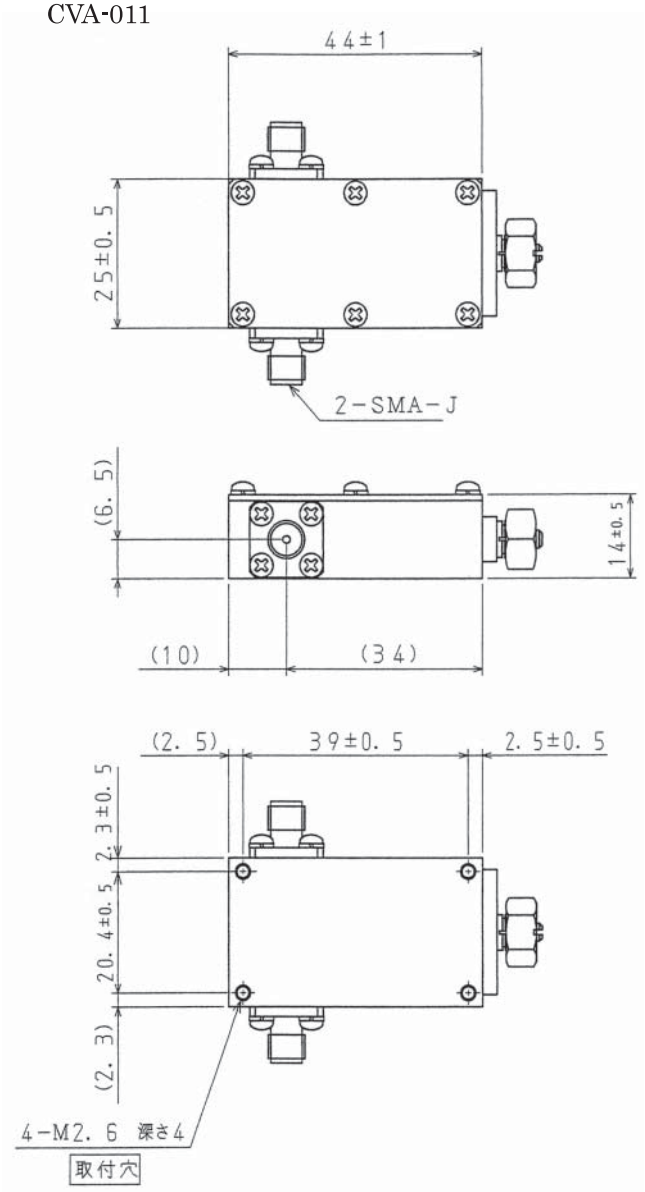
CVA-2000-15



CVA-010



CVA-011



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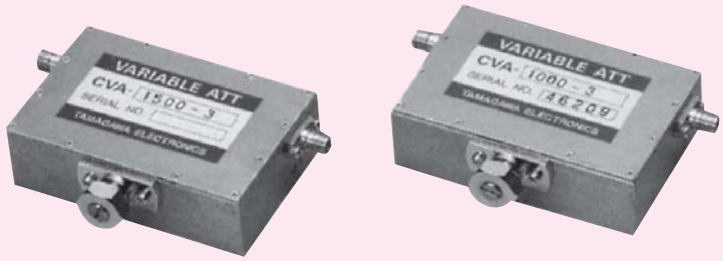
CVA Series



Product features and applications

The CVA series are continuous variable attenuators with a no-contact RF circuit. The phase change associated with attenuation variation is so small that its deviation is limited to within the bandwidth. The power capacity is 3 W at average power. Fine signal tuning is available between 0 and 2.8 dB attenuation.

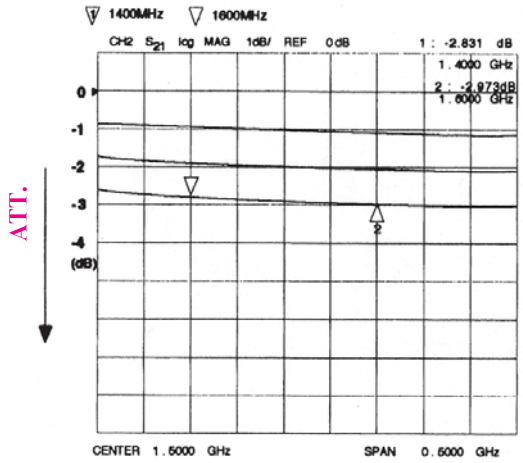
Standard Specifications

Models	Frequency Range (MHz)	Insertion loss dB (Max.)	Impedance (Ω)	Attenuation (dB)	VSWR (Max.)	Phase change (°) (Max.)	Power (W) (Max.)	Operating Temperature Range(℃)	Weight
CVA-900-3	800～1000	0.2	50	0～2.8	1.3	6	3	−10～+50	(250g)
CVA-1000-3	960～1215	0.2	50	0～2.8	1.3	6	3	−10～+50	(250g)
CVA-1500-3	1400～1600	0.3	50	0～2.8	1.3	6	3	−10～+50	(250g)
CVA-003	2070～2170	0.5	50	0～3.0	1.3	6	3	−10～+60	(220g)

All models are SMA-J connectors.

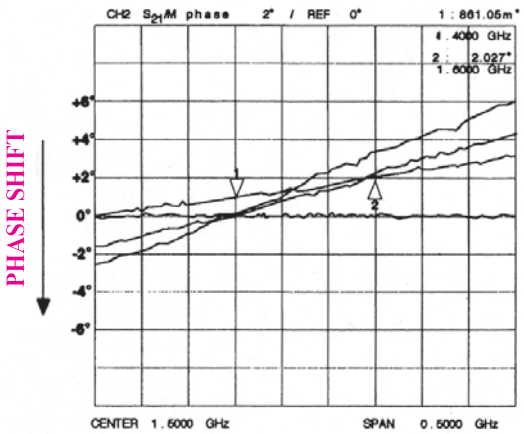
Frequency Characteristics

CVA-1500-3



FREQ. (MHz)

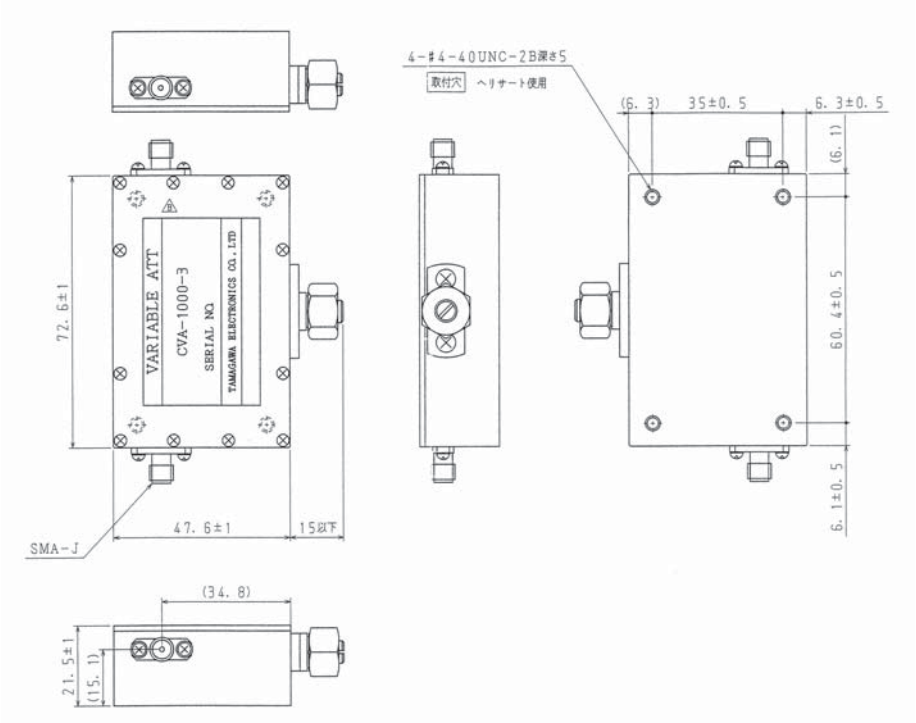
CVA-1500-3



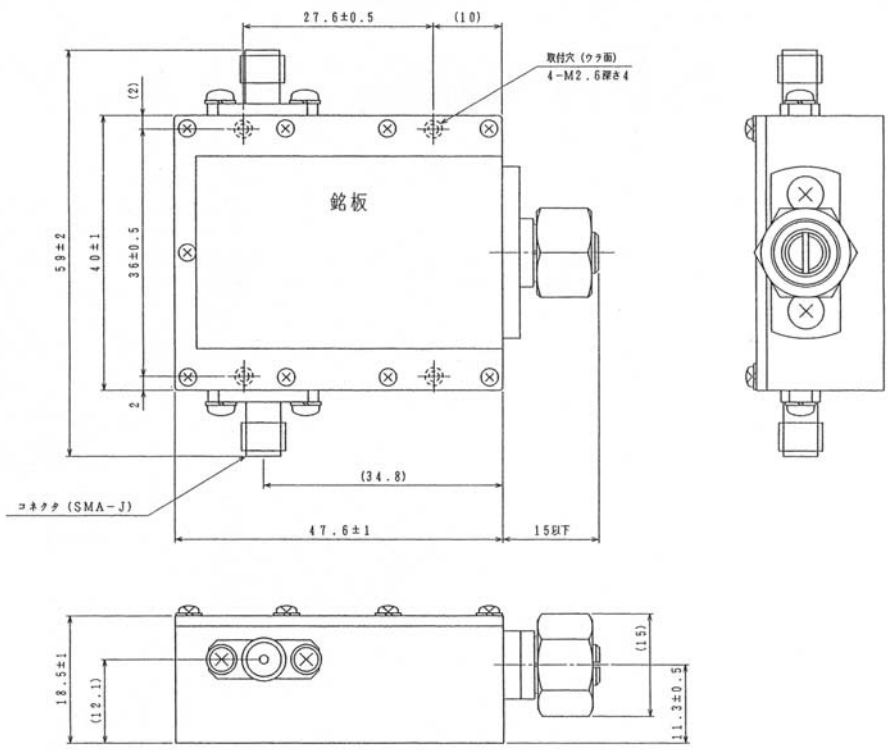
FREQ. (MHz)

■ Outline Drawings

CVA-900-3, CVA-1000-3, CVA-1500-3 are common drawings.



CVA-003



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