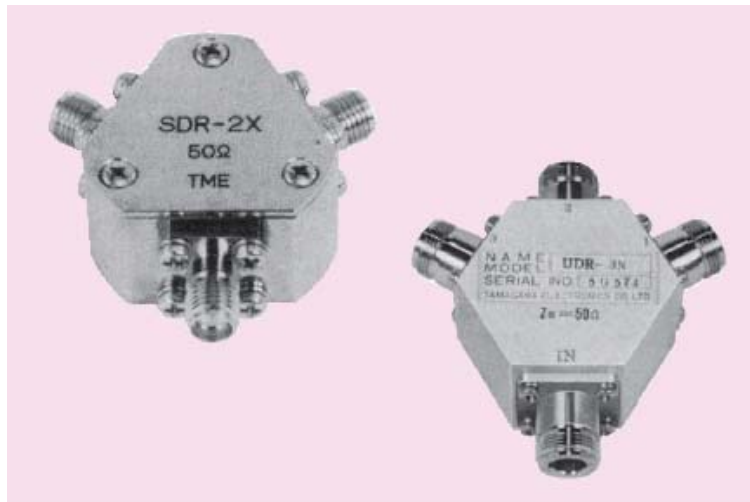


VDR·UDR·SDR·UDT Series



Product features and applications

The VDR/UDR/SDR series are resistance distributors to send a signal to multiple terminals. The applicable frequency is up to DC-250 MHz (VDR), DC-800 MHz (UDR) and DC-3,000 MHz (SDR). You can choose between 2 to 10 distribution points depending on your application. The UDT series uses a transformer to achieve lower distribution loss, and supports a 40 to 900 MHz frequency range.

	Common Specifications			
	VDR	UDR	SDR	UDT
Frequency Range	DC~250MHz	DC~800MHz	DC~3000MHz	40~900MHz
Impedance	50Ω、75Ω		50Ω	50Ω
VSWR(Max.)	50Ω : 1.2 75Ω : 1.3	50Ω : 1.2 75Ω : 1.3	as below	1.5
Power(Max.)	0.5~10W			0.25W (Max.)
Number of Ports	2~10		2	
Insertion loss	6~20dB		5dB(Max.)	
Frequency flatness	±1~1.5dB(Max.)			
Connectors	50Ω···NJ, BNCJ, SMAJ	75Ω···NCJ, C15J	50Ω···SMAJ	50Ω···NJ, BNCJ
Operating temperature range	-20°C~+65°C			

VDR · UDR series Standard Specifications

Models	Frequency Range (MHz)	Impedance (Ω)	Number of Ports	Power(W)		Insertion loss (dB)	Dimensions(mm)			Weight
				Input	Output		A	B	High	
VDR-2	DC~250	50、75	2	0.5		6.0	100	120	35	(350g)
VDR-3	DC~250	50、75	3	0.5		9.5	100	120	35	(360g)
VDR-4	DC~250	50、75	4	0.5		12.0	100	120	35	(380g)
VDR-6	DC~250	50、75	6	0.5		15.6	100	120	35	(400g)
VDR-8	DC~250	50、75	8	0.5		18.0	140	160	35	(760g)
VDR-10	DC~250	50、75	10	0.5		20.0	140	160	35	(800g)
UDR-2	DC~800	50、75	2	0.5		6.0	56	48	34	(220g)
UDR-3	DC~800	50、75	3	0.5		9.5	56	48	34	(250g)
UDR-4	DC~800	50、75	4	0.5		12.0	56	48	34	(280g)
UDR-5	DC~800	50、75	5	0.5		14.0	56	48	34	(310g)
SDR-2X	DC~3000	50	2	0.5		6.0	30φ		17	(75g)

The weight estimates VDRtype-BNCJ, UDRtype-N-J, SDRtype-SMA-J.

UDR-1000 · SDR-1000 series Standard Specifications

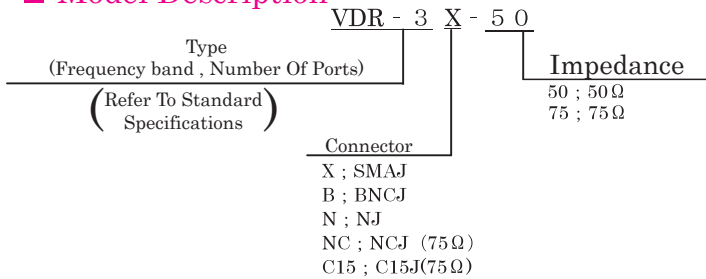
Models	Frequency Range (MHz)	Impedance	Number of Ports	Insertion loss (dB)	VSWR (Max.)	Power(W)		Dimensions(mm)			Connectors	Weight
						Input	Output	A	B	High		
UDR-1110	DC~2000	75Ω	2	6.0	1.3	10	2.5	41.5	74	24	C15J	(200g)
UDR-1111	DC~2000	75Ω	3	9.5	1.3	10	0.5	41.5	74	24	C15J	(220g)
UDR-1112	DC~2000	75Ω	4	12.0	1.3	10	0.33	41.5	92	24	C15J	(250g)
UDR-1113	DC~2000	75Ω	6	15.6	1.3	10	2.5	63.5	128	24	C15J	(450g)
UDR-1114	DC~2000	75Ω	8	18.0	1.3	10	0.33	63.5	164	24	C15J	(580g)
UDR-1115	DC~2000	75Ω	9	19.1	1.3	10	0.5	63.5	182	24	C15J	(650g)
SDR-1001	DC~3000	50Ω	2	6.0	1.3	10	2.5	48.5	97	29	NJ	(300g)
SDR-1002	DC~3000	50Ω	3	9.5	1.3	10	1.2	48.5	97	29	NJ	(330g)
SDR-1003	DC~3000	50Ω	4	12.0	1.3	10	0.7	48.5	123	29	NJ	(420g)
SDR-1004	DC~3000	50Ω	6	15.6	1.3	10	0.5	71	175	29	NJ	(800g)
SDR-1005	DC~3000	50Ω	8	18.0	1.35	10	0.7	71	227	29	NJ	(1000g)
SDR-1006	DC~3000	50Ω	9	19.1	1.35	10	0.5	71	253	29	NJ	(1100g)

■ UDT series Standard Specifications

Models	Frequency Range (MHz)	Impedance	Number of Ports	Power(Max.)	Dimensions(mm)			Weight
					W	D	H	
UDT-2	40~900MHz	50Ω	2	0.25W	76	40	32	(350g)

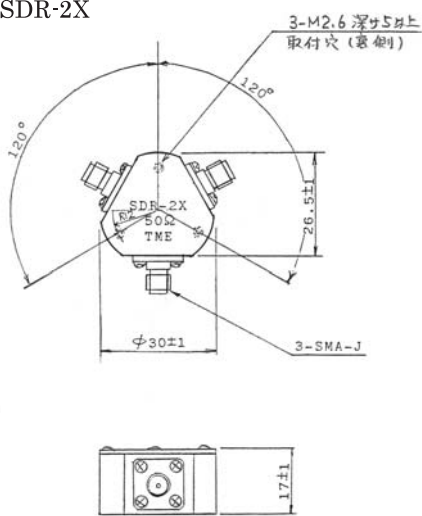
※ Operating Temperature Range -10°C~+50°C

■ Model Description

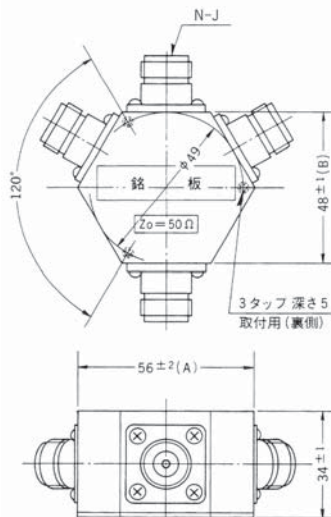


■ Outline Drawings

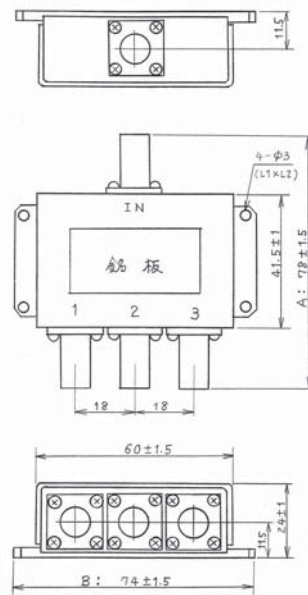
SDR-2X



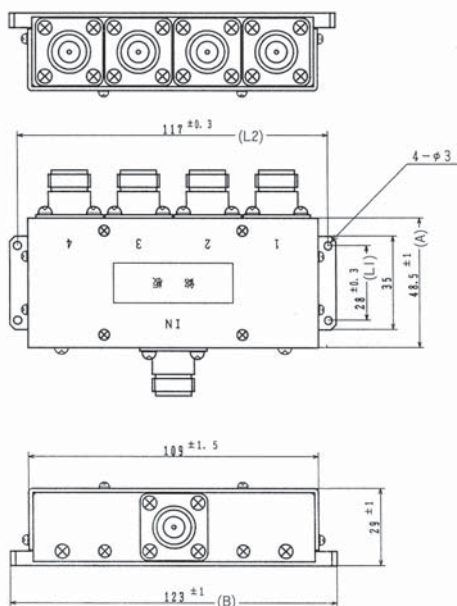
UDR-3N



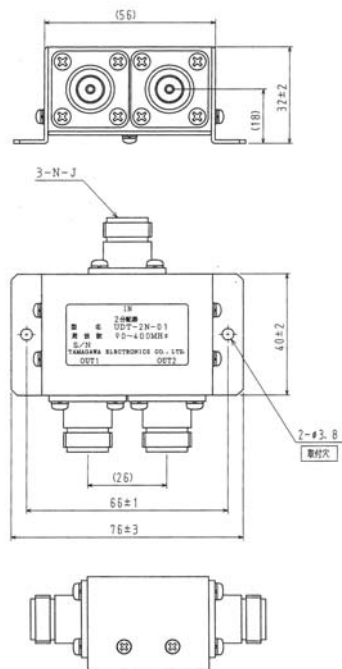
UDR-1111



SDR-1003



UDT-2N



UPD · SPD Series



Product features and applications

The UPS/SPD series are power dividers covering the 500 to 3,000 MHz frequency range (UPD) and 3,000 to 8,000 MHz frequency range (SPD).

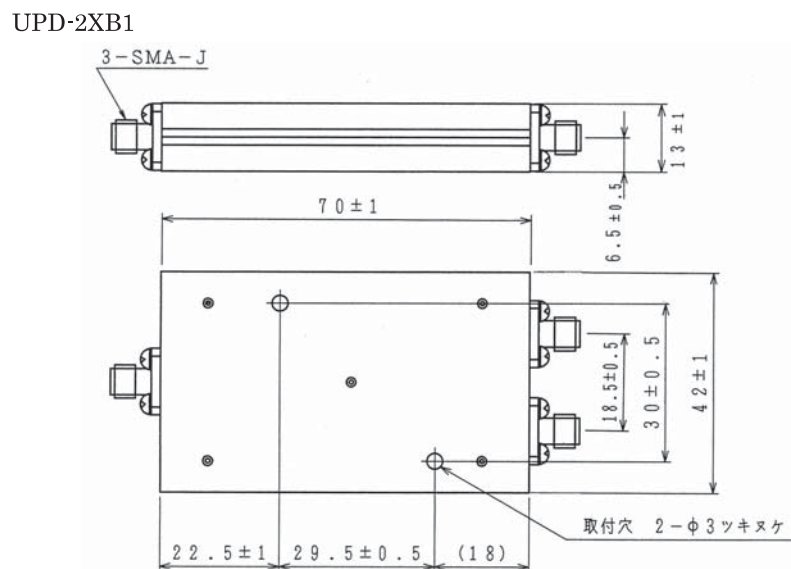
The UPD series includes two-distribution and four-distribution models; select the best one for your purpose.

	Common Specifications	
	UPD	SPD
Frequency Range	500~3000(MHz)	3000~8000(MHz)
Impedance	50 Ω	
VSWR	1.25(Max.)	
Power(Max.)	1W (Max.)	
Connector	SMAJ	
Operating Temperature Range	-10~+60°C	

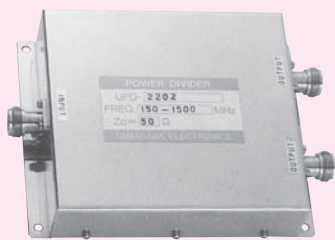
UPD · SPD series Standard Specifications

Models	Frequency Range (MHz)	Number of Ports	Insertion Loss dB (Max.)	Isolation dB (Min.)	Dimensions(mm)			Weight
					L	D	H	
UPD-2XA1	500~1500	2	3.5	20	70	42	13	(110g)
UPD-4XA1	500~1500	4	6.9	20	150	83	13.5	(460g)
UPD-2XB1	1500~3000	2	3.5	20	70	42	13	(130g)
SPD-2XA1	3000~8000	2	3.8	20	50	42	13	(85g)

Outline Drawings



UPD Series



UPD-2202



UPD-4027

Product features and applications

The UPD series are Wilkinson dividers supporting wide bandwidths. The applicable frequency for a unit ranges from the VHF to UHF band (UPD-2,000) and 700 to 2,300 MHz (UPD-4,000). The amplitude and phase deviations are so small that over 17 dB isolation is achieved within a band. This model is suitable for combining and distributing high frequency signals.

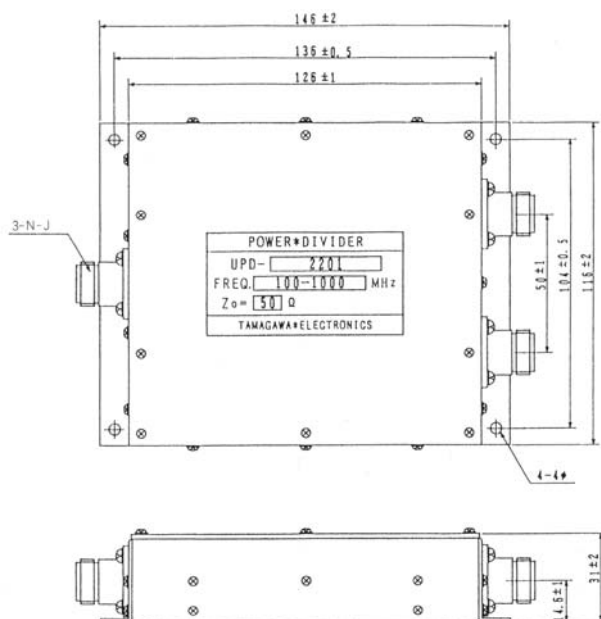
Standard Specifications

Models	Number of Ports	Frequency Range (MHz)	Phase Deviation (°) (Max.)	Isolation dB (Min.)	Frequency Flatness (dB) (Max.)	Isolation loss (dB) (Max.)	Impedance (Ω)	Power (W) (Max.)	Connectors	Weight
UPD-2201	2	100~1000	2	17	0.2	4.0	50	3 (note:1)	NJ	(780g)
UPD-2202	2	150~1500	2	17	0.2	4.0	50	3 (note:1)	NJ	(780g)
UPD-2301	2	100~1000	2	17	0.2	4.0	75	3 (note:1)	NJ	(780g)
UPD-4134	2	470~770	2	17	0.2	4.0	50	3 (note:1)	SMA-J	(300g)
UPD-4026	2	700~2300	1.25	20	0.1	4.0	50	5 (note:2)	SMA-J	(300g)
UPD-4041	2	700~2300	2	20	0.1	4.0	50	5 (note:2)	NJ	(400g)
UPD-4087	3	700~2300	4	17	0.7	5.5±1.5	50	3 (note:1)	NJ	(780g)
UPD-4027	4	700~2300	2.5	20	0.25	7.5	50	5 (note:2)	SMA-J	(1100g)
UPD-4040	4	700~2300	2.5	20	0.25	7.5	50	5 (note:2)	NJ	(1100g)

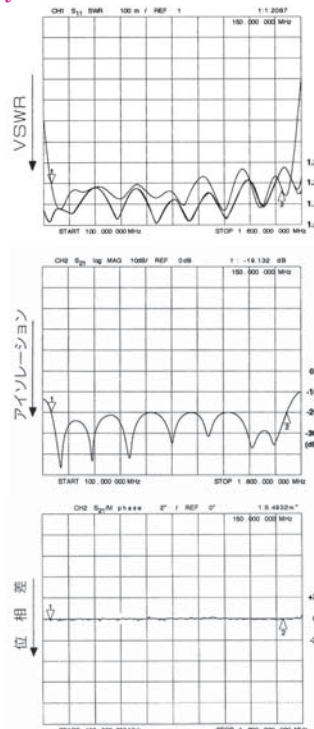
★ Operating Temperature -10~+65°C
 (note:1) Input power at Output power System VSWR max; 1.5:1
 (note:2) Value at VSWR 1.2:1, 1 watt VSWR 2.0:1

Outline Drawings

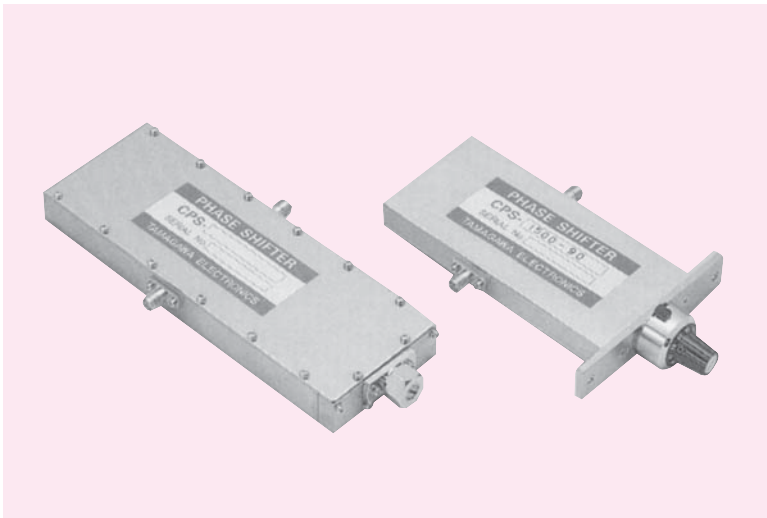
UPD-2201



Frequency Characteristics



CPS Series



Product features and applications

The CPS series are continuous variable phase shifters featuring lower insertion loss and high stability, owing to the special dielectric used for continuous phase change.

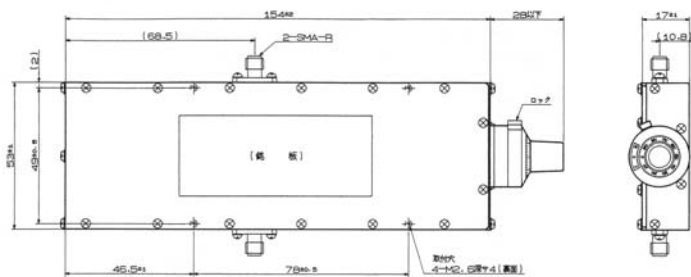
Two models, supporting either 900 MHz or 1,500 MHz center frequency, are available. The no-electrical contact design enables high repeatability without causing intermodulation.

Standard Specifications

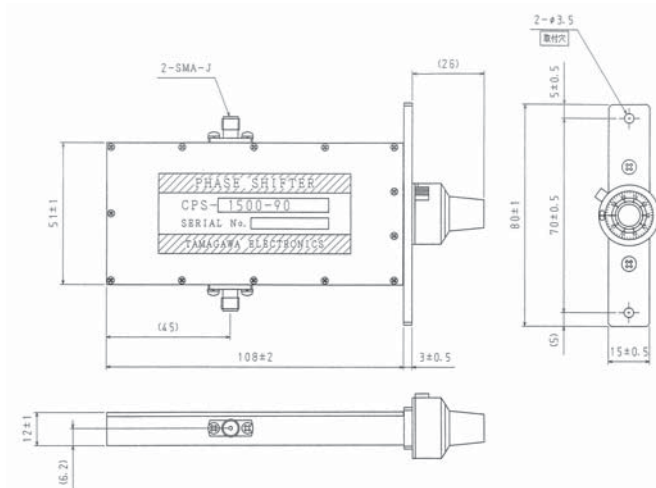
Models	Frequency Range (MHz)	Insertion loss (dB)(Max.)	Phase variable (°)(Min.)	Impedance (Ω)	VSWR (Max.)	Power (W) (Max.)	Operating temperature range(°C)	Connector	Weight
CPS-800-90	800~1000	0.5	90	50	1.3	50	-20~+65	SMAJ	(400g)
CPS-1500-90	1400~1600	0.3	90	50	1.3	50	-20~+65	SMAJ	(300g)

Outline Drawings

CPS-800-90

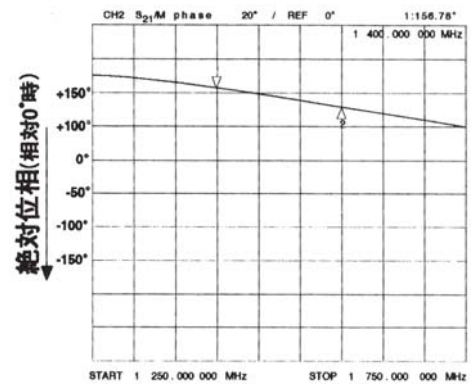


CPS-1500-90

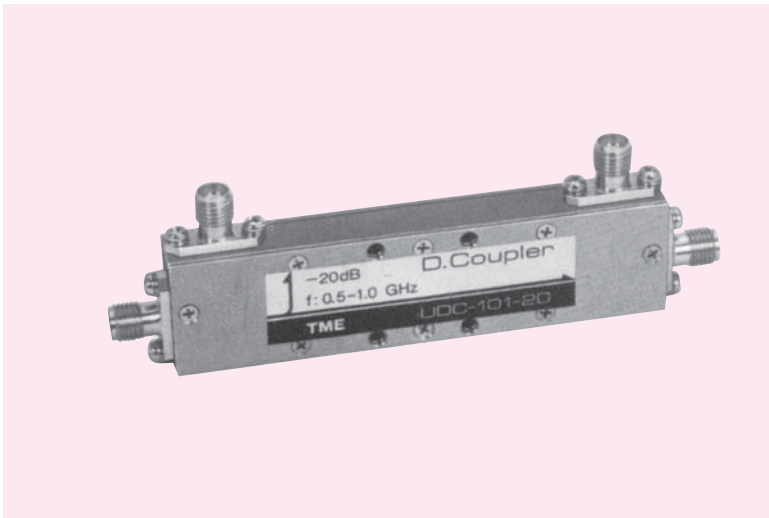


Frequency Characteristic

CPS-1500-90



UDC · SDC Series



■ Product features and applications

The UDC/SDC series are directional couplers with a tri-plate structure covering the octave band. 10 dB and 20 dB couplings are available. You can find the best item for your purpose.

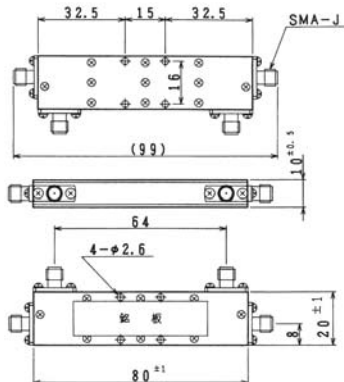
	Common Specifications		
	UDC	SDC-101-*	SDC-111-*
Frequency Range	500~2000	2000~4000	4800~6000
Impedance	50 Ω		
VSWR	1.2(Max.)		1.25(Max.)
Insertion Loss	0.3dB (Max.)		1.2dB (Max.)
Connector	SMAJ		
Power(Max.)	10W		SDC-111-20 ; 50W
Operating Temperature Range	-10~+65°C		

■ Standard Specifications

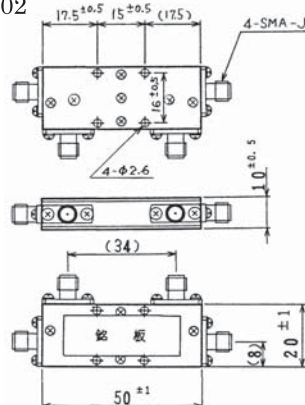
Models	Frequency Range (MHz)	Coupling (dB)	Coupling deviation (dB)	Directivity dB (min.)	Dimensions(mm)			Weight
					L	D	H	
UDC-101-10	500~1000	10±1	±0.75	20-	80	20	10	(100g)
UDC-101-20	500~1000	20±1.2	±0.75	20	80	20	10	(100g)
UDC-102-10	1000~2000	10±1.2	±0.75	18	50	20	10	(70g)
UDC-102-20	1000~2000	20±1.2	±0.75	18	50	20	10	(70g)
SDC-101-10	2000~4000	10±1.2	±0.75	18	34	20	10	(25g)
SDC-101-20	2000~4000	20±1.2	±0.75	18	34	20	10	(25g)
NEW SDC-111-20	4800~6000	20±1.2	±0.75	17	33	20	10	(25g)

■ Outline Drawings

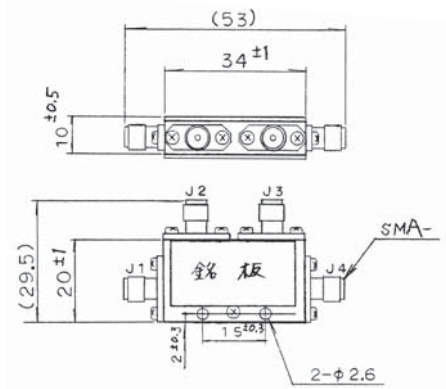
UDC-101



UDC-102



SDC-101



UPD-3000 Series



Product features and applications

The UPD-3000 series are coaxial 3 dB couplers with SMA connector. The compact and lightweight coupler series includes 7 models supporting 400 MHz, 800 MHz, 1,500 MHz, 2,000 MHz, 5,000 MHz and 7,000 MHz frequency range. The phase difference between outputs is 90 degrees and high isolation is achieved. It is ideal for combining and distributing high frequency signals.

A terminator (ST-003XPA) can be purchased separately. When a terminator (ST-003XPA) is installed at the ISO port for distribution, the allowable power is 2 W. (It is 0.3 W for signal combination.)

	Common Specifications
Impedance	50 Ω
Power(Max.)	50W
Phase Deviation	90 ± 2°
Operating Temperature Range	-10°C ~ +65°C
Connector	SMA-J

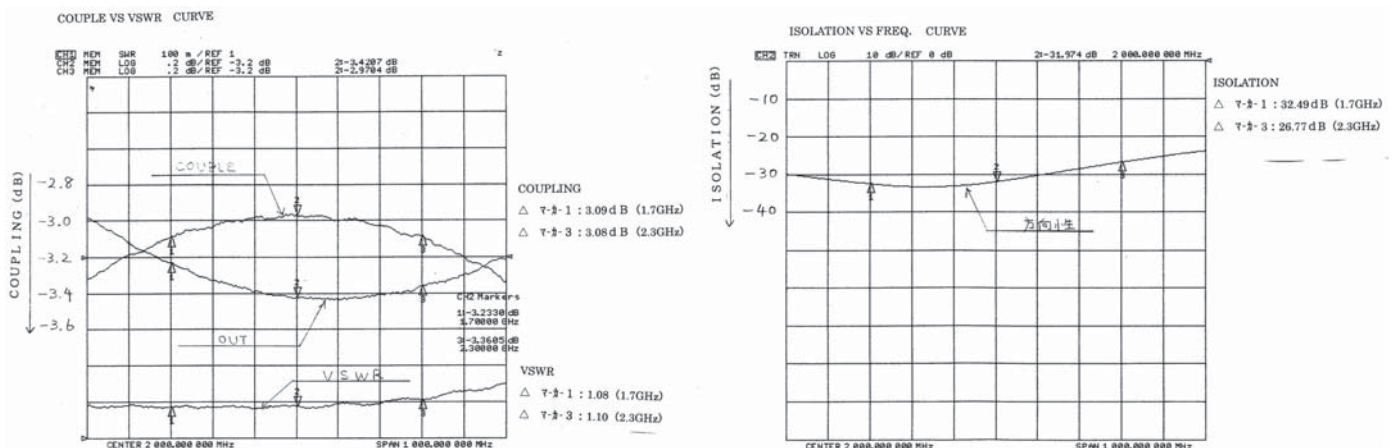
Standard Specifications

Models	Frequency Range (MHz)	Coupling (dB)	Coupling deviation (dB)	Directivity (dB) Min	Insertion loss (dB) (Max.)	Weight
UPD-3008	360~470	3.2	±0.3	20	1.2	(30 g)
UPD-3013	800~1000	3.2	±0.3	20	1.2	(30 g)
UPD-3014	1000~2000	3.2	±0.3	20	1.2	(30 g)
UPD-3025	1700~2300	3.2	±0.3	20	1.2	(30 g)
UPD-3050	4000~6000	3.2	±0.5	17	1.25	(30 g)
UPD-3055	4000~7800	3.2	±0.5	17	1.25	(30 g)

Optional terminator(ST-003XPA) is recommended.

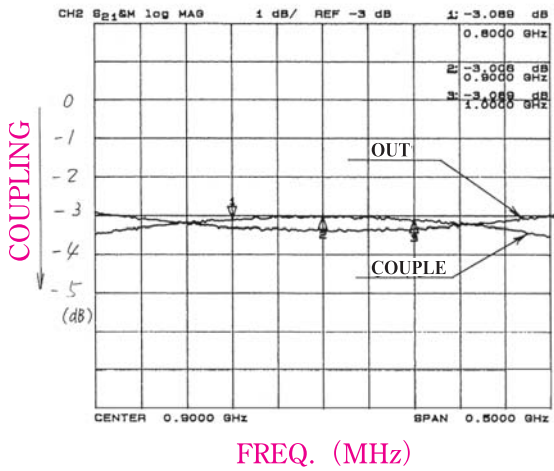
If Iso port terminated by St-003XPA at dividing signals, the maximum power is 2W(at combing is 0.3W).

Frequency Characteristics



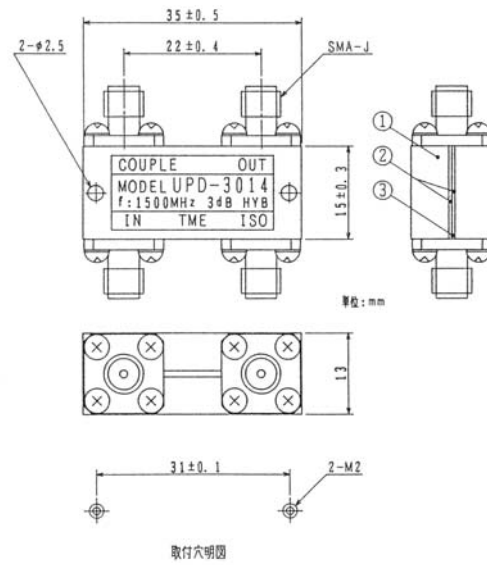
■ Frequency Characteristics

UPD-3013

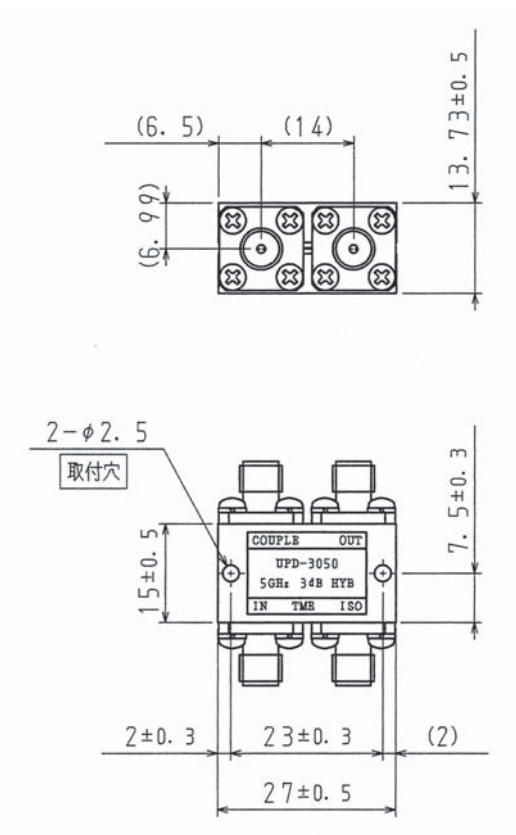


■ Outline Drawings

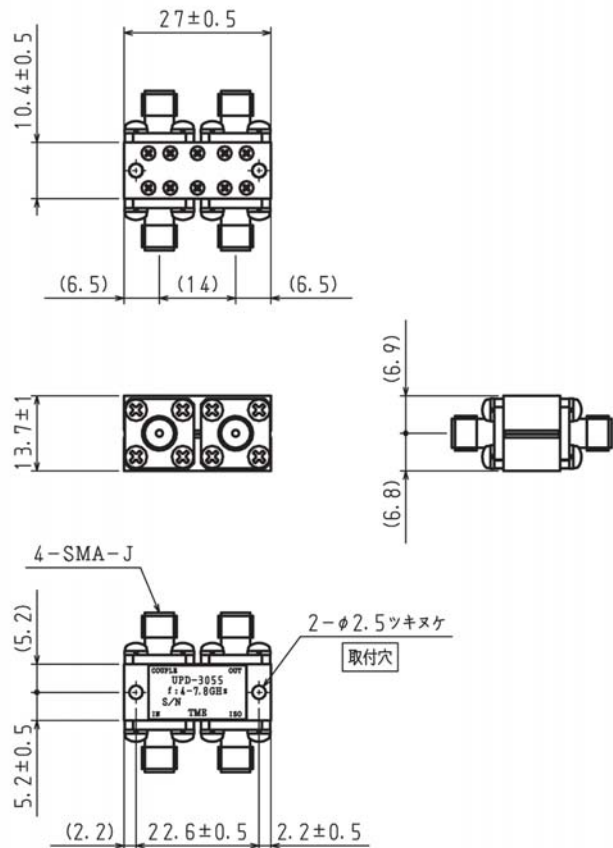
UPD-3008~3025



UPD-3050



UPD-3055



UPD-4000 Series

■ Product features and applications



The UPD-4000 series are directional couplers with lower insertion loss, covering the 800 to 2,200 MHz frequency range.

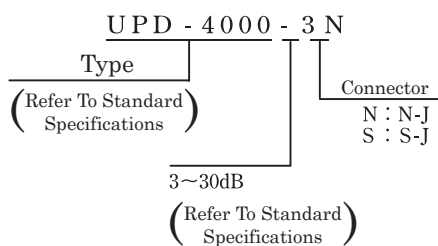
11 coupling variations are available. The allowable power is 150 W at maximum (except for the 3 dB coupling model). It is suitable for amplifier monitor circuits of various wireless devices.

	Common Specifications
Frequency Range	800~2200MHz
Impedance	50Ω
VSWR	1.2
Coupling deviation	1.5 dB p-p (Max.)
Connectors	N-J、S-J
Operating Temperature Range	-10°C~65°C
Dimensions	191×47×33 (mm、L×D×H)
Weight	(500g)

■ Standard Specifications

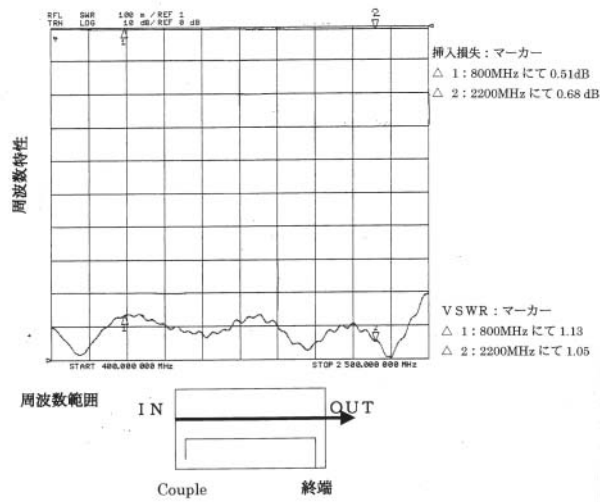
Models	Insertion loss dB (Max.)	Coupling (dB)	Directivity dB (Min.)	Power (W) (Max.)
UPD-4000-3N	3.2	3±1	20	50
UPD-4000-6N	1.8	6±1	18	150
UPD-4000-7N	1.7	7±1	18	150
UPD-4000-8N	1.3	8±1	18	150
UPD-4000-9N	1.2	9±1	18	150
UPD-4000-10N	1.0	10±1	18	150
UPD-4000-12N	0.8	12±1	18	150
UPD-4000-14N	0.7	14±1	18	150
UPD-4000-15N	0.5	15±1	18	150
UPD-4000-20N	0.3	20±1	18	150
UPD-4000-30N	0.2	30±1	18	150

■ Model Description

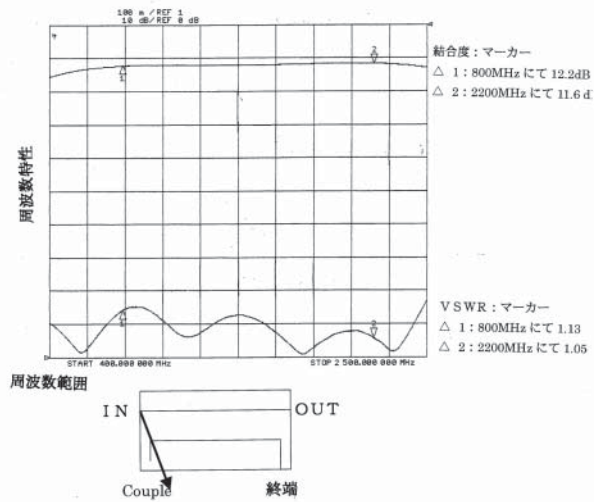


Frequency Characteristics

UPD-4000-12N 挿入損失 VS VSWR
800MHz~2000MHz (12dBカプア)



UPD-4000-12N 結合度 VS VSWR
800MHz~2000MHz (12dBカプア)



Outline Drawings

UPD-4000

