

2 RF Filters

Antenna Internal Duplexer

Wideband Diplexer

Wideband Triplexer

Constant Impedance BPF(CIB Combiner)

28GHz Small BPF

3.5GHz Small BPF

23GHz Waveguide Filter

Quadplexer

Sixplexer

Front End BPF

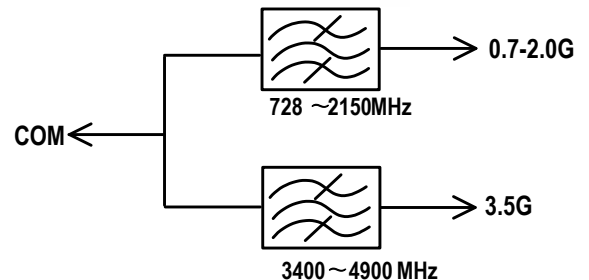
Double Switch Diplexer

Repeater Interface Unit

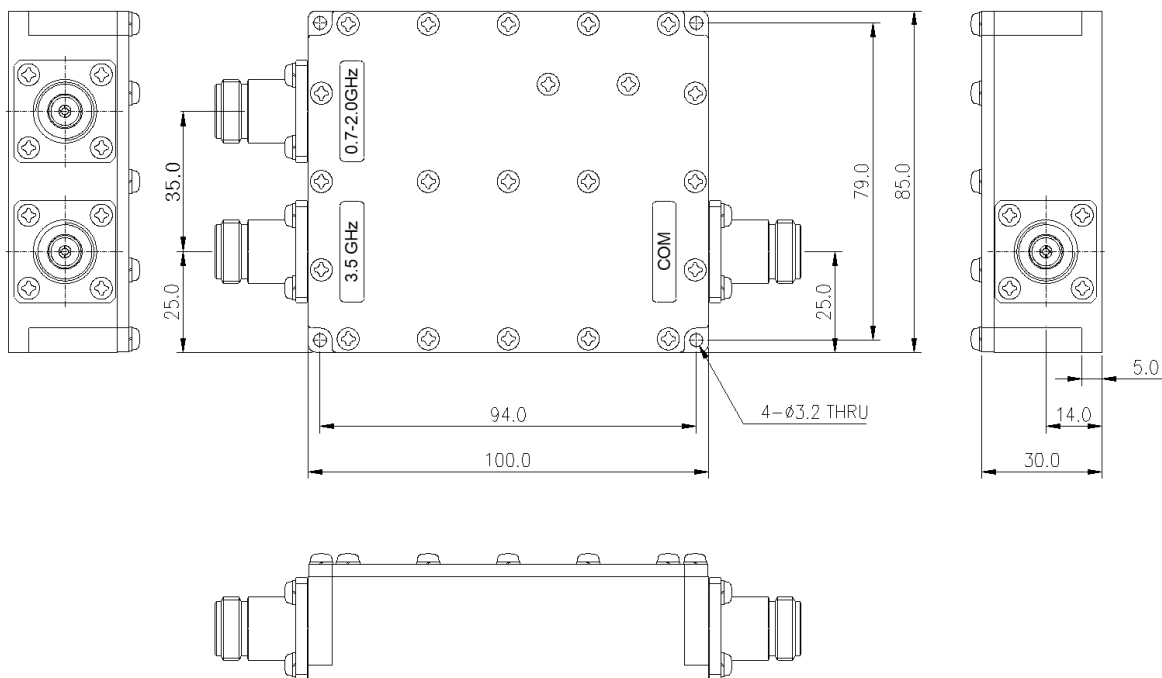
- Industry leading PIM performance
- Suitable for feeders cables reduction & operation under outdoor condition
- Designed for network modernization application
- Suitable for mobile base-station antenna & small RF system

Technical Specification

Part No.	KG-WDUP-21-49	
	Low Path	High Path
Frequency	728~2150 MHz	3400 ~ 4900 MHz
Insertion Loss	≤ 0.3 dB	≤ 0.3 dB
VSWR	≤ 1.2 dB	≤ 1.2 dB
Port Isolation	≥ 25 dB	
Max Input Power(Avg)	200 W	160 W
PIMD	≥ 168 dBc Typ. (40 dBm x 2 Tone, 5rd order)	
Impedance	50 Ω	
Temperature range	-10 ~ +80 °C	
Protection class	IPX5	
Weight	<1.0Kg	
Connector Type	N-Female	
Dimensions	100.0 x 85.0 x 30.0 mm	

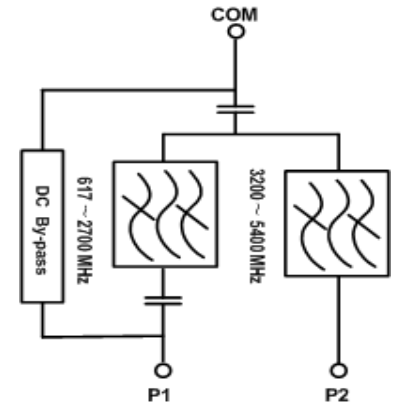


Outline Drawing

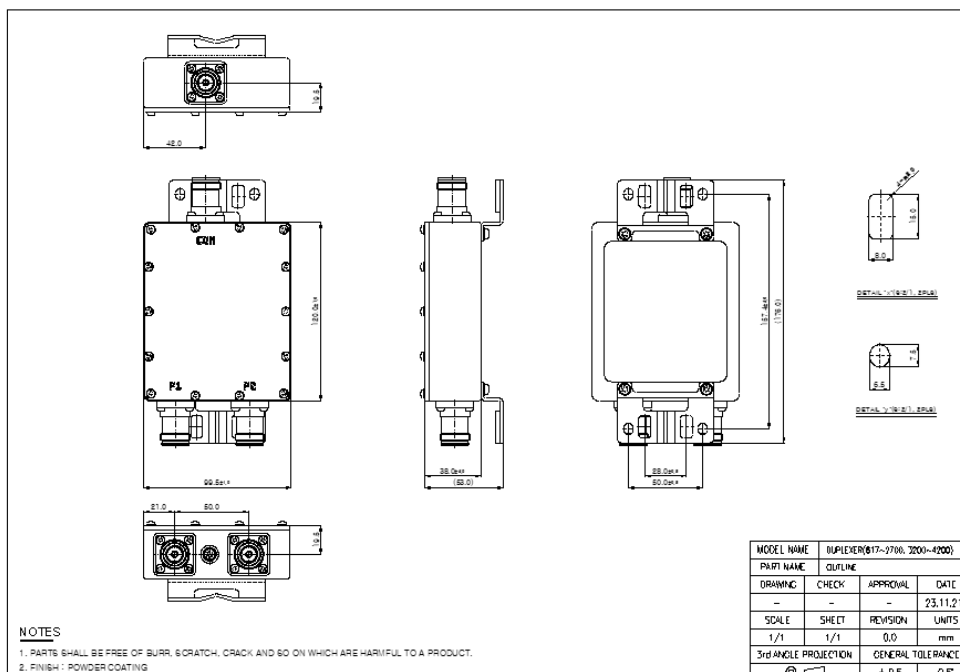


Technical Specification

Part No.	KG-DIP-24-02-01	
Operating Frequency	Pass Band 1	Pass Band 2
	617MHz~2700MHz	3200MHz~5400MHz
Insertion Loss	0.5dB max.	0.5dB max.
Return Loss	18.0dB min.	18.0dB min.
Isolation	50.0dB min.	50.0dB min.
DC Bypass	Yes	No
Power	200W min.	100W min.
PIMD	[3 th]@Freq.20W 2tone ,160dBc min	
Impedance	50 Ω	
Temperature range	-40 ~ +65 °C	
Connector Type	4.3-10 Female	
Bracket	Pole Mount	
Weight	1.5 Kg max	
Dimensions (W x H x D)	99.5.0 x 38.0 x 130.0 mm	

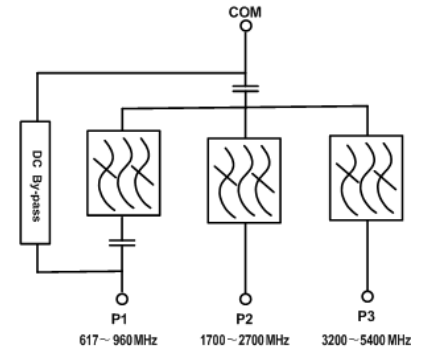


Outline Drawing

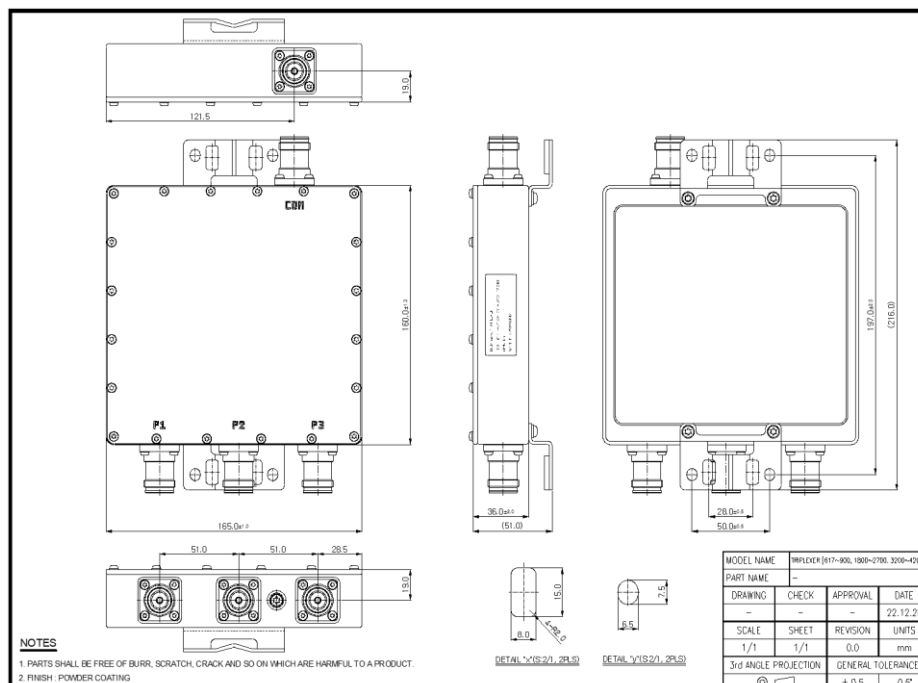


Technical Specification

Part No.	KG-TPX-24-02-01		
Frequency(MHz)	617MHz~960MHz	1700MHz~2700MHz	3200MHz~5400MHz
Insertion Loss	≤ 0.5 dB		
Ripple	≤ 0.35 dB		
Return Loss	≥ 18 dB		
Isolation	≥ 45 dB		
Input Power	200W min	100W min	100W min
PIMD	[3 th]@Freq.20W 2tone ,160dBc min		
Impedance	50 Ω		
Temperature range	-40 ~ +65 °C		
Bracket	Pole Mount		
Connector Type	4.3-10 Female		
Weight	2.8 Kg max		
Dimensions	165.0 x 38.0 x 160.0 mm		



Outline Drawing



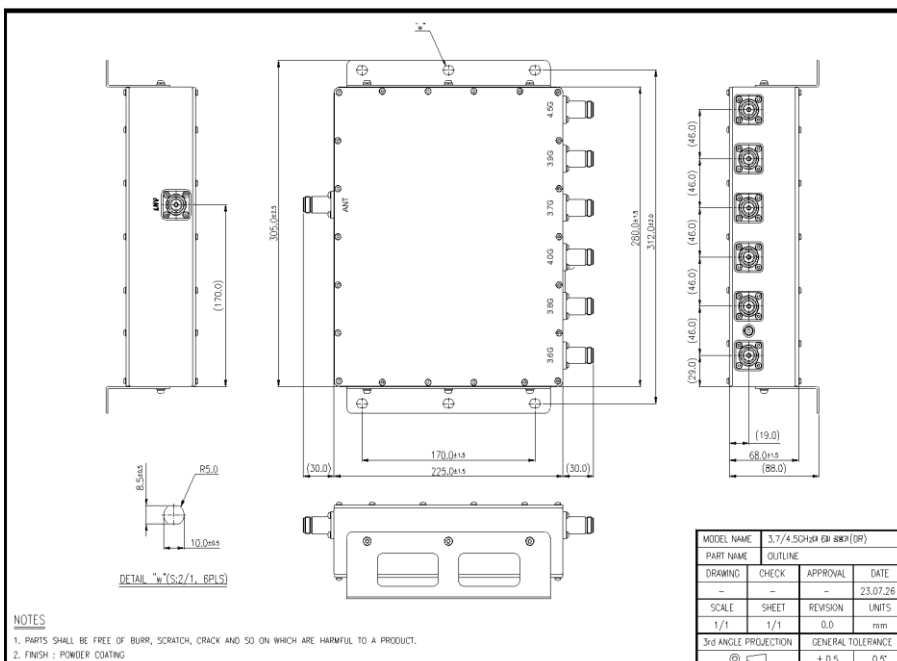
- In band combining and low loss, small size and high attenuation in narrow guard band
- Easy system migration in the same frequency band
- Maximize the usage of guard band and full spectrum utilization

Technical Specification

Part No.	KG-CIB-3600_4600					
	N company	K company	R company	S company	K company	D company
Frequency	3600 – 3699 MHz	3701 – 3799 MHz	3801 – 3899 MHz	3901 – 3999 MHz	4001 – 4100 MHz	4500 – 4600 MHz
Bandwidth	99 MHz	98 MHz	98 MHz	98 MHz	99 MHz	100 MHz
Insertion Loss	≤ 2.7 dB	≤ 3.4 dB	≤ 2.7 dB	≤ 3.1 dB	≤ 3.4 dB	≤ 0.8 dB
VSWR (All Port)	≤ 1.4 dB					
Isolation	≥ 30 dB					
動作溫度	-10°C ~ 50°C					
保存溫度	-20°C ~ 60°C					
Impedance	50 Ω					
Protection class	IP67					
Connector Type	N-Type(Female)					



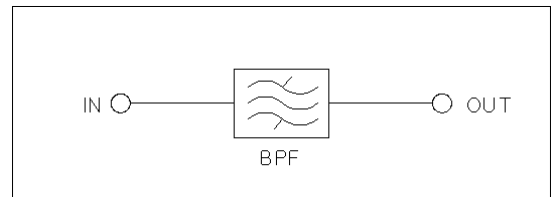
Outline Drawing



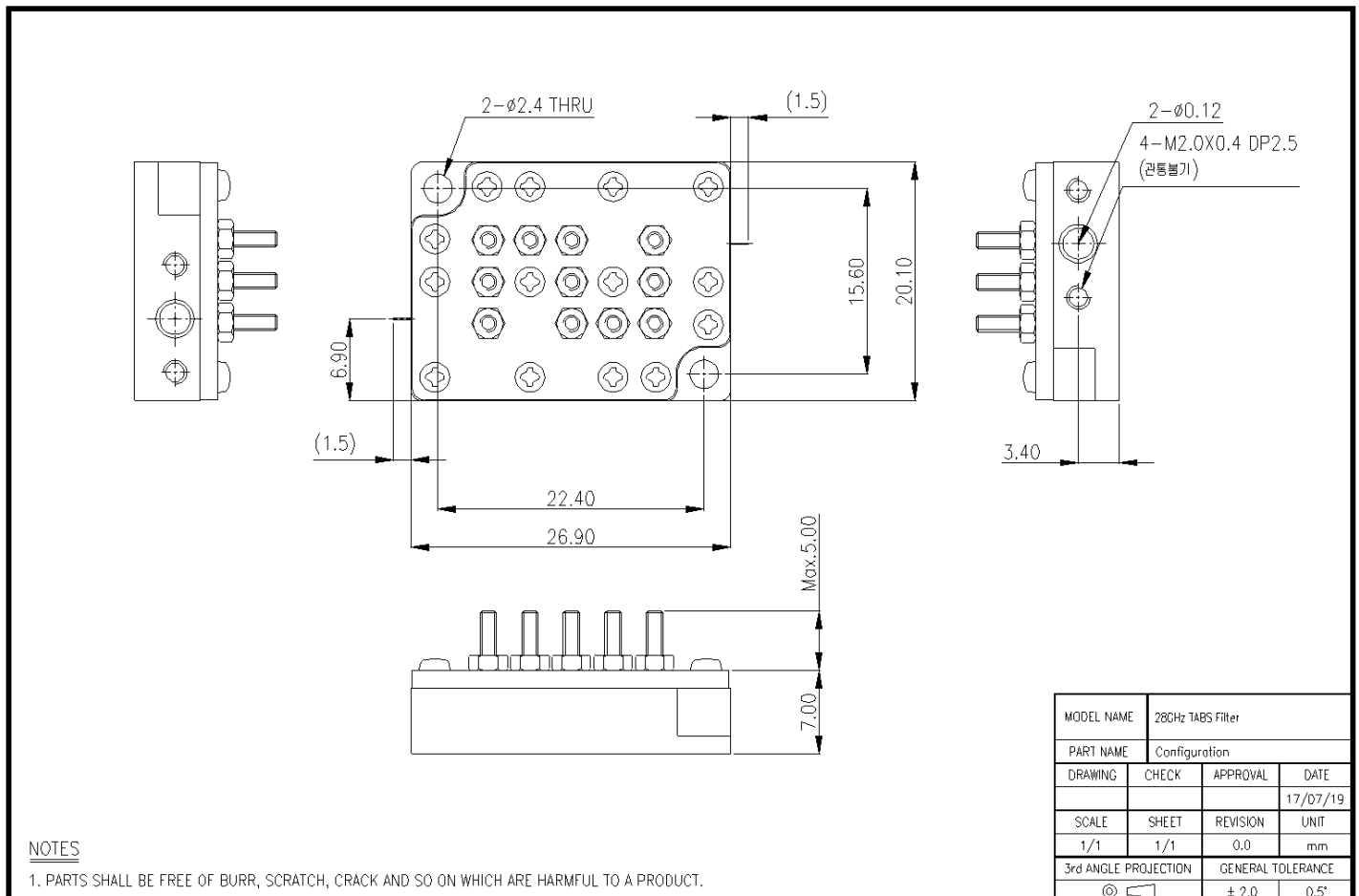
- Application for 27500 ~ 28500 MHz band
- Very small size(Light, Thin, Short, Small)
- Suitable for mobile base-station antenna & small RF system

Technical Specification

Part No.	KG-BPF-28G-US
Frequency	27500 ~ 28500MHz
Bandwidth	1000MHz
Insertion Loss(≤ 1.40 dB(Temp. ≤ 1.40 dB)
Ripple	≤ 1.0 dB(Temp. ≤ 1.20 dB)
Return Loss	≥ 18 dB(Temp. ≥ 16 dB)
Attenuation	TBD
25704MHz	≥ 60 dB
Max. Power(Average)	1W
Max. Power(Peak)	10W
Impedance	50 Ω
Temperature range	-40 ~ +80 °C
Connector Type	FEED Thru
Dimensions (W x H x D)	26.9 × 20.1 × 7.0 mm



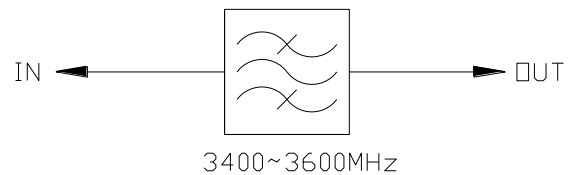
Outline Drawing



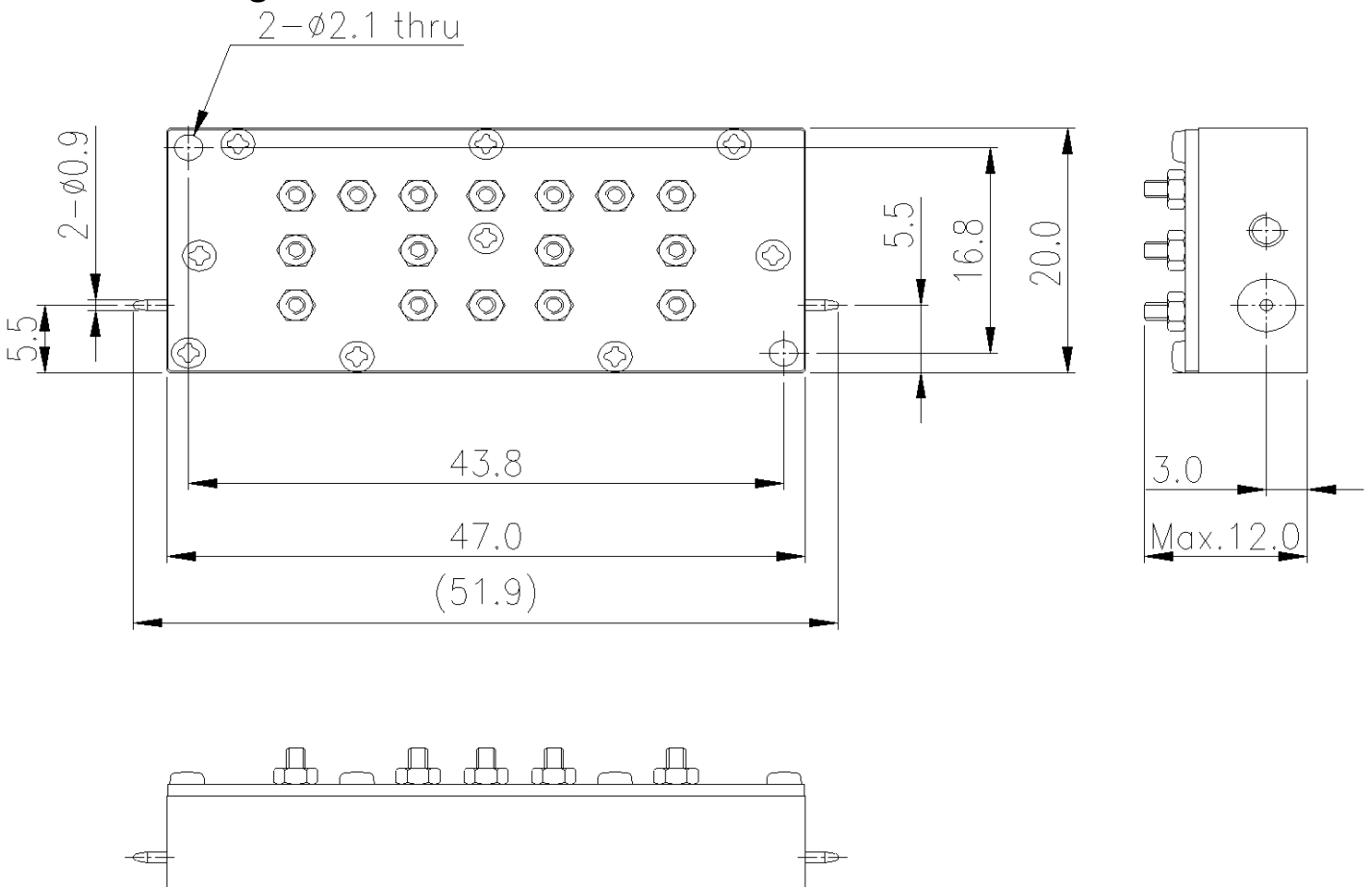
- Application for 3400 ~ 3500 MHz band
- Very small size(Light, Thin, Short, Small)
- Suitable for mobile base-station antenna & small RF system

Technical Specification

Part No.	KG-BPF-3500M-US
Frequency	3400 ~ 3600MHz
Bandwidth	200MHz
Insertion Loss(AVG)	≤ 1.0 dB
Ripple	≤ 0.5 dB
Return Loss	≥ 18 dB
Attenuation	TBD
400 ~ 3100MHz	≥ 70 dB
3100~3280MHz	≥ 40 dB
3705~5600MHz	≥ 40 dB
5600~8000MHz	≥ 25 dB
Max. Input Power	4W
Impedance	50 Ω
Temperature range	-20 ~ +70 °C
Connector Type	PCB On(Pin Type)
Dimensions (W x H x D)	47.0 × 20.0 × 12.0 mm



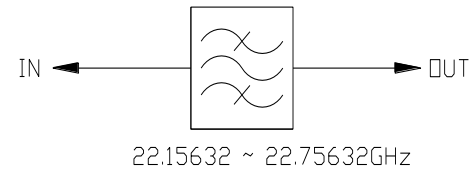
Outline Drawing



- Application for 22.15632 ~ 22.75632 GHz band repeaters

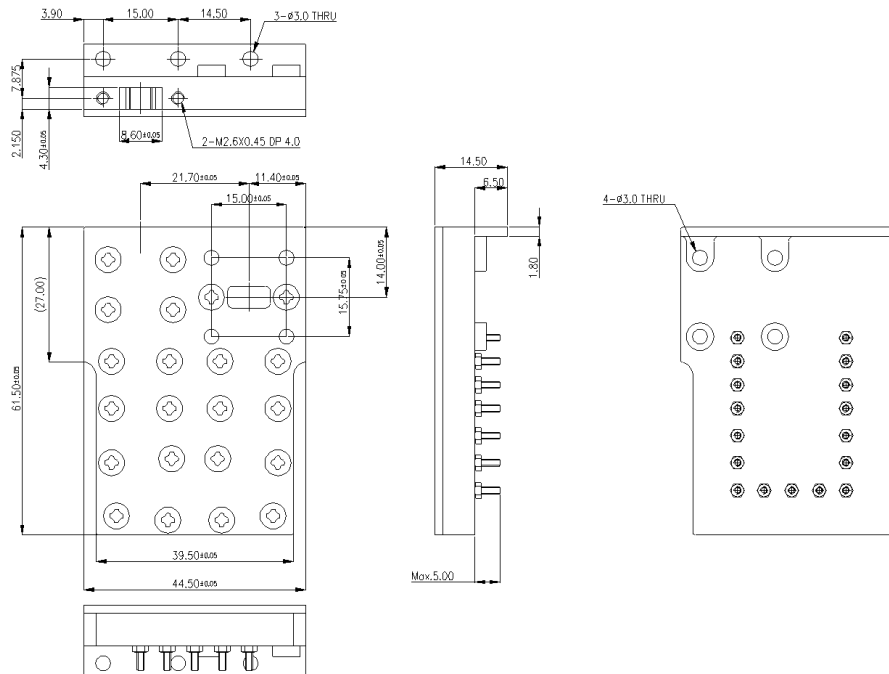
Technical Specification

Part No.	KG-23G WG1
Frequency	22.15632 ~ 22.75632GHz
Bandwidth	0.6GHz
Insertion Loss(AVG)	≤ 1.3 dB / ≤ 1.5 dB(Temp.)
Ripple	≤ 0.7 dB / ≤ 0.8 dB dB(Temp.)
Return Loss	≥ 18 dB / ≥ 15 dB(Temp.)
Attenuation	
20.15232GHz	≥ 60 dB
22.8936GHz	≥ 16 dB
Max. Input Power	1W
Impedance	50 Ω
Temperature range	-40 ~ +80 °C
Connector Type	Waveguide Port
Dimensions (W x H x D)	61.5 × 44.5 × 14.5 mm



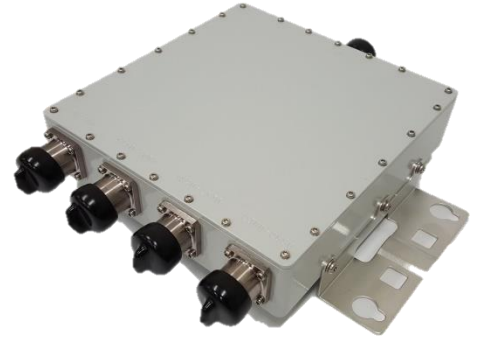
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Outline Drawing

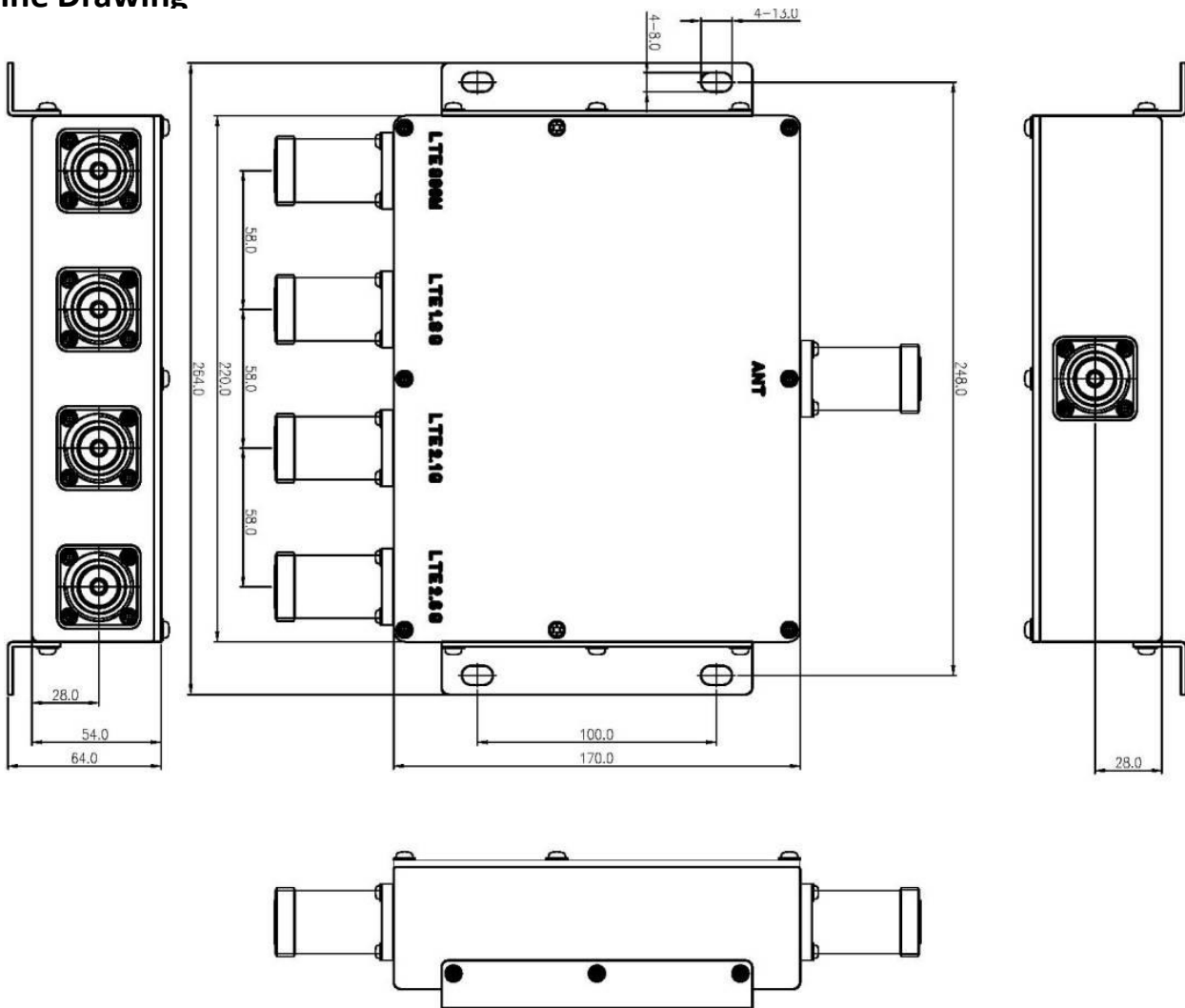


Technical Specification

Model	KG-QPX-7-8-17/21-19			
Frequency (MHz)	698- 787	806- 894	1710-1755 2110-2155	1850 - 1995
Insertion Loss	≤ 1.0 Db			
Ripple	≤ 0.5 dB			
Return Loss	≥ 18 dB			
Isolation	≥ 60 dB(698-787/806-894) ≥ 80 dB(69-787/1710-2155) ≥ 80 dB(806-894/1710-2155) ≥ 60 dB(1710-1755 & 2110-2155/1850-1995)			
Max. Input Power	120 W			
PIMD	≥ 161 dBc Typ. (43 dBm x 2 Tone, 3 rd order)			
Impedance	50 Ω			
Temperature range	-40 ~ +65 °C			
Protection class	IP66			
Connector Type	Din-Female			
Dimensions	460 x 360 x 184 mm			



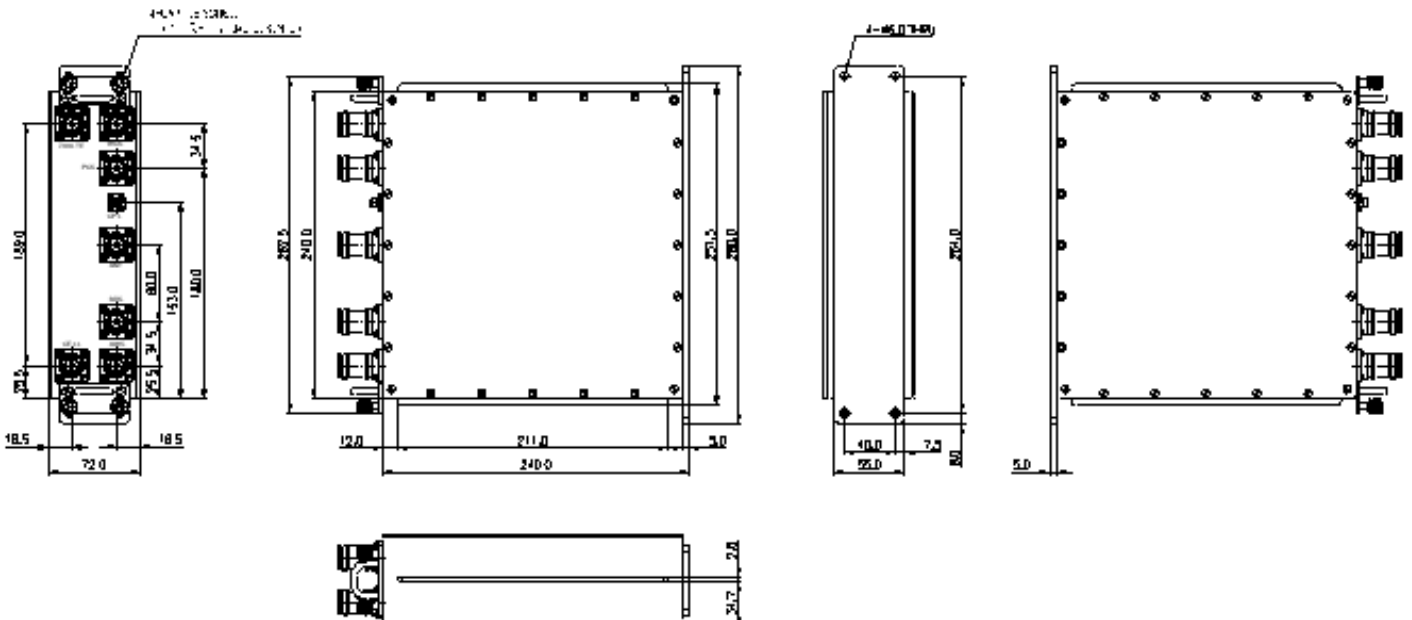
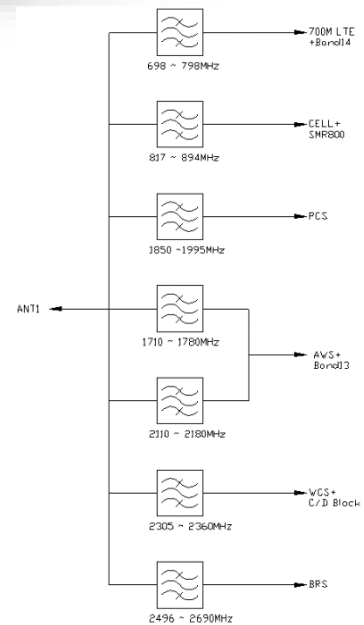
Outline Drawing



Technical Specification

Part No.	KG-SPX-7-8-17-19-21-23-24-U	
Frequency	700LTE+Band14	698 ~ 798MHz
	CELL+SMR800	817 ~ 894MHz
	PCS	1850 ~ 1995MHz
	AWS+Band13	1710 ~ 1780MHz
		2110 ~ 2180MHz
	WCS+C/D Block	2305 ~ 2360MHz
BRS	2496 ~ 2690MHz	
Bandwidth	700LTE+Band14	100MHz
	CELL+SMR800	77MHz
	PCS	145MHz
	AWS+Band13	70MHz
		70MHz
	WCS+C/D Block	55MHz
BRS	194MHz	
Insertion Loss	≤ 0.7 dB	
Ripple	≤ 0.3 dB	
Return Loss	≥ 20 dB	
Isolation	≤ 45.0 dBc	
	AWS → WCS	≤ 40.0 dBc
	WCS → AWS, BRS	≤ 40.0 dBc
Attenuation	≤ 25 dB	
2800 ~ 5380MHz	≤ 25 dB	
CPL	40 ± 4.0dB	
PIMD	≥ 160 dBc(2x43dBm)	
Operating Power	Input : 50W, ANT : 250W	
Impedance	50 Ω	
Temperature range	-40 ~ +70 °C	
Connector Type	Input, Ant port : 4.3-10(Female), CPL port : SMA(female)	
Dimensions	280.0 × 72.0 × 240.0 mm	
IP class	IP67	

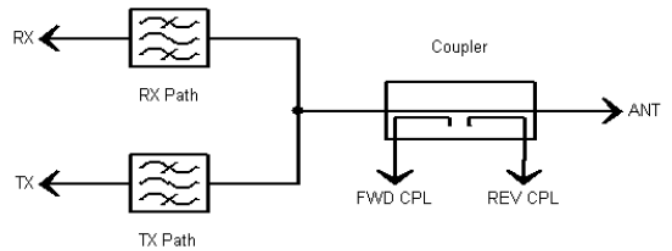
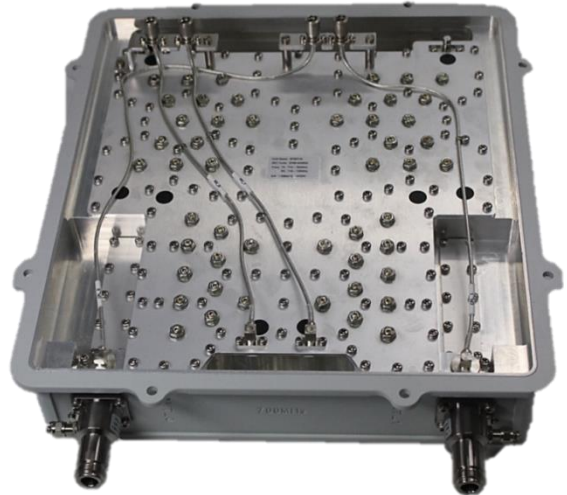
- 6in 1out multi-band combiner
- Application for 700/800/1700/1900/2100/2300/2500 MHz band
- Suitable for feeders cables reduction



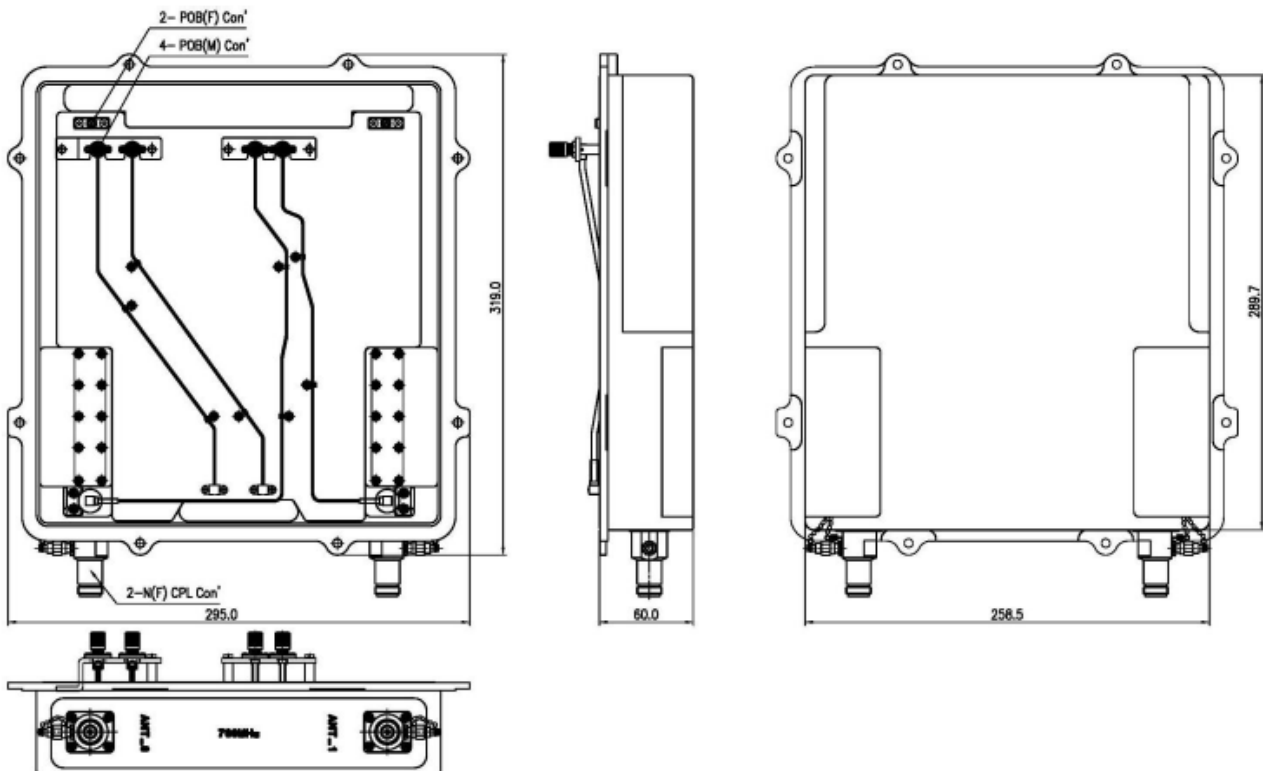
- Application for 718 ~ 728 MHz / 773 ~ 783 MHz band repeaters
- High reliability & Suitable for operation under outdoor conditions

Technical Specification

Part No.		KG-DUP-700M-FEB	
		Rx	Tx
Frequency		718 – 728 MHz	773 – 783 MHz
Bandwidth		10 MHz	
Insertion Loss		≤ 0.5 dB	≤ 0.5 dB
Ripple		≥ 0.8 dB	≥ 0.8 dB
Return Loss		≥ 20 dB	
Rejection	Rx	≥ 90 dB	
	Tx	≥ 102 dB	
Coupling	FWD CPL	-	30 ± 1.0
	REV CPL	40 ± 1.0	
	Isolation	≥ 60 dB	
Input Power	Average	100 W	
	Peak	1550 W	
Impedance		50 Ω	
Temperature range		-30 ~ +85 °C	
Connector Type		ANT : N Type(F), TX : POB(F), RX : POB(M)	
Dimensions (W x H x D)		295.0 x 319.0 x 60.0 mm	



Outline Drawing



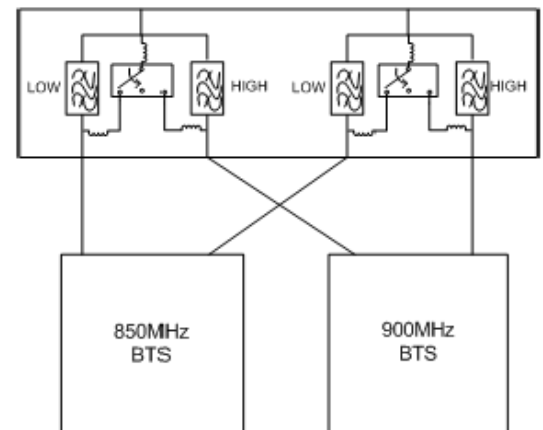
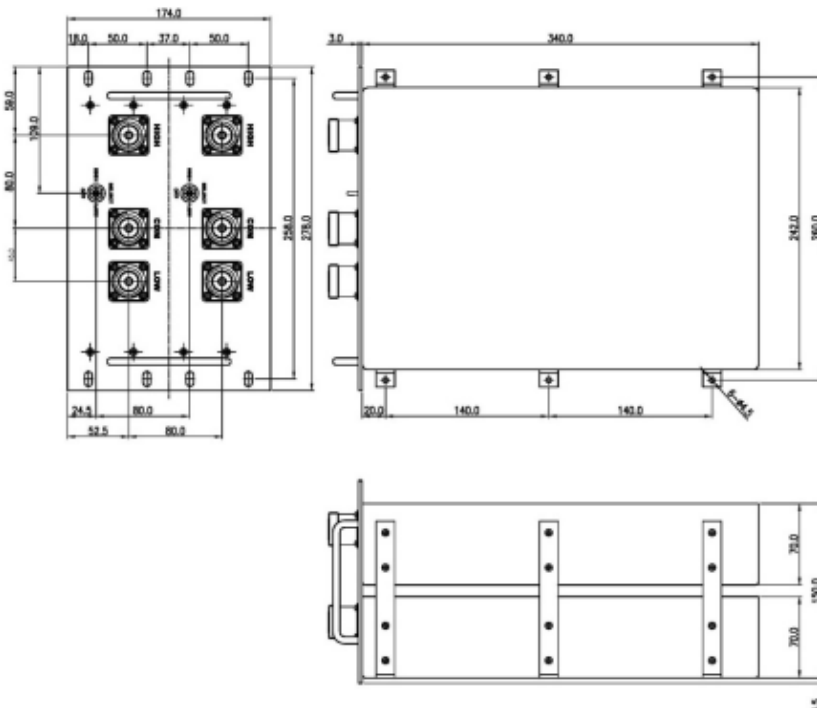
- Application for 815 & 900MHz Diplexing (806~890, 902~960 MHz)
- High reliability & Suitable for operation under outdoor conditions

Technical Specification

Part No	KG-DIP-815-900-SW-DB	
Frequency	LOW	806 ~ 890MHz
	HIGH	902~960MHz
	RET OOK	2.076~2.276MHz
	RET FSK	9.59~11.17MHz
Bandwidth	LOW	84MHz
	HIGH	58MHz
Insertion Loss	LOW	1.0dB max
	HIGH	1.0dB max @902~947MHz 0.6dB max @947~960MHz
	RET OOK / FSK	0.15dB typ
Ripple	LOW / HIGH	0.6typ
VSWR	LOW / HIGH	1.2 : 1
Isolation	≥ 90dBc	
PIMD	≥ 161 dBc Typ. (43dBm x 2 Tone)	
Max. Input Power	200W	
Impedance	50Ω	
Temperature range	0 ~ +50	
Protection class	-	
Weight	-	
Connector Type	N-Female	
Dimensions (W x H x D)	254.0 x 282.0 x 55.5mm	



Outline Drawing



Technical Specification

Model	KG-RIU-19-21		
Parameter	Frequency	Port	Spec
Pass Band	1960 ~ 1980MHz	RX → ANT	20MHz
	2150 ~ 2170MHz	ANT → TX	20MHz
Insertion Loss	1960 ~ 1980MHz	RX → ANT	36.0 ± 1.0
	2150 ~ 2170MHz	ANT → TX	36.0 ± 1.0
Return Loss	1960 ~ 1980MHz	RX → ANT	>15.0dB
	2150 ~ 2170MHz	ANT → TX	>15.0dB
Isolation	1960 ~ 1980MHz	ANT → TX	>60.0dBc
	2150 ~ 2170MHz	RX → ANT	>60.0dBc
Coupling	1960 ~ 1980MHz	RX → RX CPL	4.0 ± 1.0
	2150 ~ 2170MHz	ANT → TX CPL	36.0 ± 1.0
Max Input Power	100W		
Impedance	50Ω		
Connector Type	ANT : N(f), port : SMA(f)		
Temperature range	-40°C ~ 85°C		
Weight	< 4.5 KG		
Dimensions	482.6mm(W) x 240mm(D) x 66mm(H)		



Outline Drawing

