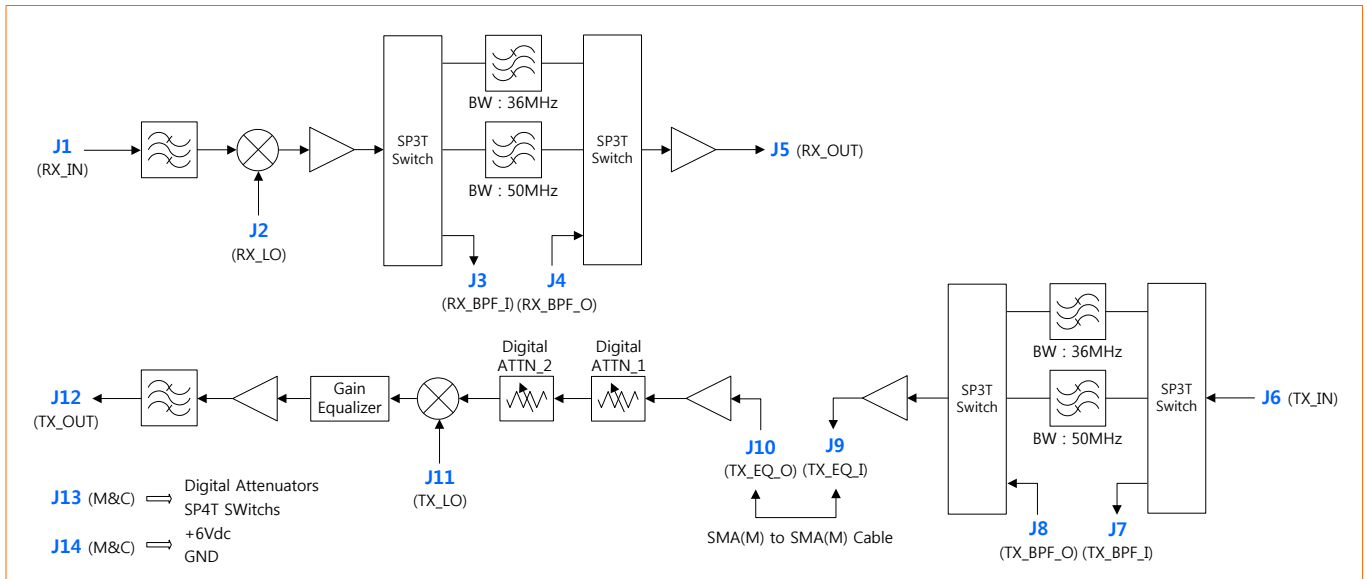
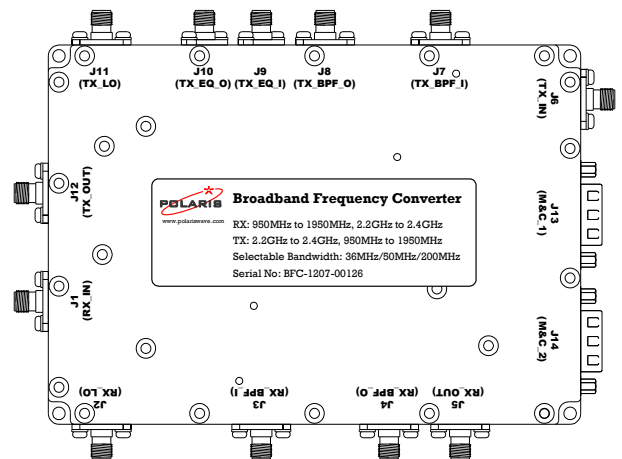


Broadband Frequency Converter



Features

- ❖ Broad operating bandwidth
 - up to 200MHz
- ❖ User selectable bandwidth
 - 36MHz, 50MHz, or 200MHz
- ❖ Receive path
 - Input frequency : 950MHz to 1,950MHz
 - Output frequency : 2.2GHz to 2.4GHz
- ❖ Transmit path
 - Input frequency : 2.2GHz to 2.4GHz
 - Output frequency : 950MHz to 1,950MHz
- ❖ Spurious suppression
 - $\leq -50\text{dBc}$ @in-band



Applications

- ❖ Satellite communication system
- ❖ Broadband wireless access system
- ❖ Satellite link test equipment

Specifications

Parameters			Specifications	Remarks
Common	Gain flatness		$\leq 2\text{dBpp}$	at any 200MHz bandwidth in 950 to 1,950MHz
	Spurious	In band	$\leq -50\text{dBc}$	in 950MHz to 1,950MHz
		Out of band	$\leq -60\text{dBc}$	
	LO	Frequency	3.25GHz to 4.25GHz	
		Input power	+15dBm	
Selectable bandwidth		36MHz, 50MHz, or 200MHz		
Receive path	Input frequency		950MHz to 1,950MHz	
	Output frequency		2.2GHz to 2.4GHz	
	Gain		-5dB	
Transmit path	Input frequency		2.2GHz to 2.4GHz	
	Output frequency		950MHz to 1,950MHz	
	Gain		+15dB	
	Attenuation	Range	0 to -40dB	
Resolution		0.5dB		
Supply voltage			+6Vdc	
Current consumption			+1.5A max.	
Connectors	RX_IN	J1	SMA (F), ST, 50 Ω	Input, L-Band_RF
	RX_LO	J2	SMA (F), ST, 50 Ω	Input, RX_LO
	RX_BPF_I*	J3	SMA (F), ST, 50 Ω	Input, External Cavity Filter
	RX_BPF_O*	J4	SMA (F), ST, 50 Ω	Output, External Cavity Filter
	RX_OUT	J5	SMA (F), ST, 50 Ω	Output, RX_RF
	TX_IN	J6	SMA (F), ST, 50 Ω	Input, TX_RF
	TX_BPF_I**	J7	SMA (F), ST, 50 Ω	Input, External Cavity Filter
	TX_BPF_O**	J8	SMA (F), ST, 50 Ω	Output, External Cavity Filter
	TX_EQ_I	J9	SMA (F), ST, 50 Ω	Option
	TX_EQ_O	J10	SMA (F), ST, 50 Ω	Option

Parameters		Specifications		Remarks
TX_LO	J11	SMA (F), ST, 50Ω		Input, TX_LO
TX_OUT	J12	SMA (F), ST, 50Ω		Output, TX_RF
M&C_1	J13	D_SUB_9pin (Mail)		Digital Attenuators & SP3T Switches Control
		P1: SP3T_CTL4 P3: ATT_EN2 P5: N/C P7: SP3T_CTL1 P9: ATT_CLK	P2: SP3T_CTL2 P4: ATT_DATA P6: SP3T_CTL3 P8: ATT_EN1	
M&C_2	J14	D_SUB_9pin (Mail)		DC Power Supply
		P1: GND P5, P9: +6Vdc P3, P7: N/C	P2, P4, P6, P8: N/C	
Dimension (mm)		150(L) x 105(W) x 22.3(H)		

*: RX Cavity Filter (200MHz Bandwidth)

** : TX Cavity Filter (200MHz Bandwidth)

