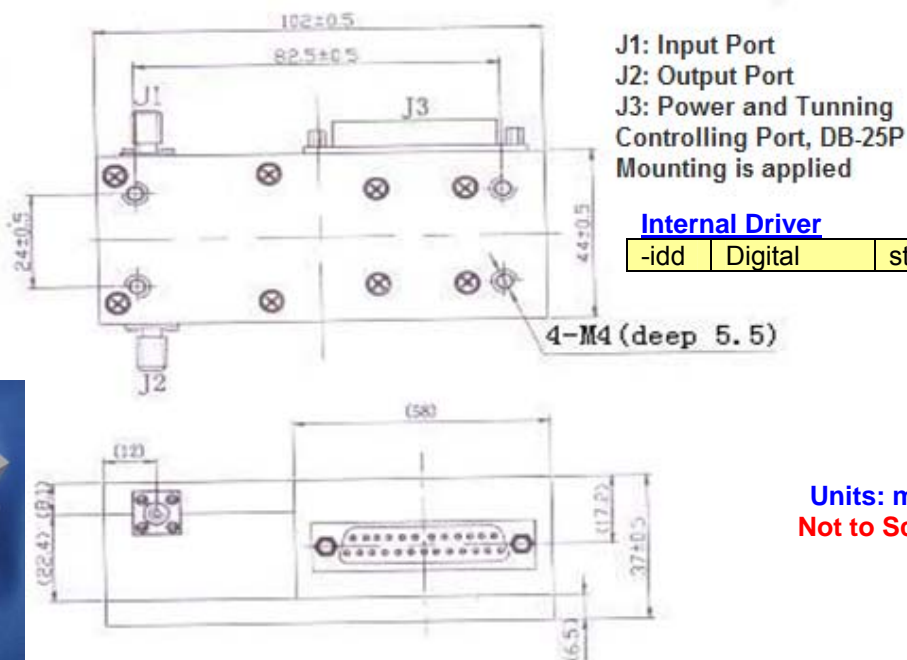
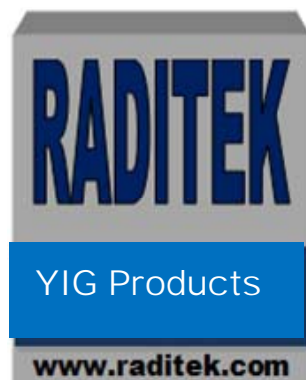


6 to 18GHz, 200-500MHz Bandwidth, YIG Bandpass Filter

Part number: RYBPF-6-18-450M-SMAf-15v-idd-i3



Specifications		Units
Frequency Range	6~18	GHz
3dB Bandwidth, Min	200	MHz
Insertion Loss, Max	8	dB
Off Resonance Isolation, Min	50	dB
Off Resonance Spurious, Min	40	dB
Combined Ripple and Spurious, Min	2.5	dB
Selectivity, typ.	15dB/octave	
Linearity, max	±25	MHz
Hysteresis, Max	25	MHz
Central Frequency Drift, Max	35	MHz
Limiting level, min	10	dBm
24V Heater Current (Surge @25°C), typ.	350~500	mA
24V Heater Current (Steady @25°C), typ.	150 mA	mA
Digital Control	DB25-P 12bitTTL	
Current, +15V	800	mA
Current, -15V	50	mA
I/O Impedance	50	Ohm
Connector	SMA-K	
Working Temperature	0~+55	°C
Weight	≤800	g
Dimensions:	4.01 x 1.73 x 1.45	in
Tolerance:(±0.5mm, 0.02in)	102 x 44 x 37	mm

6 to 18GHz, 200-500MHz Bandwidth, YIG Bandpass Filter

Part number: RYBPF-6-18-450M-SMAf-15v-idd-i3

Example Part Number: RYBPF-6-18-450M-SMAf-15v-idd-i3

Specifications				Units
Frequency Range	6~18	6~18	6~18	GHz
Stages	5	5	4	
3dB Bandwidth, Min	450	500	450	MHz
Insertion Loss, Max	6	7	6	dB
Off Resonance Isolation, Min	80	80	70	dB
Off Resonance Spurious, Min	40	60	40	dB
Combined Ripple and Spurious, Min	2.5	2.5	2.5	dB
Selectivity, type		25dB /Octave		
Tuning Linearity, typ	±10	±25	±14	MHz
Hysteresis, Max	20	25	20	MHz
Central Frequency Drift, Max	20	35	±14 (0 to +50 °C)	MHz
Limiting level, min	0	10	10	dBm
24V Heater Current (Surge @25°C), typ	350~500	350~500	350~500	mA
24V Heater Current (Steady @25°C), typ	150 mA	150 mA	150 mA	mA
Digital Control	DB25-P 12bitTTL	DB25-P 12bitTTL	DB25-P 12bitTTL	
Current, +15V	800	800	50	mA
Current, -15V	50	50	900	mA
I/O Impedance	50	50	50	Ohm
Connector	SMA-K	SMA-K	SMA-Female (RF) 25Pin (DC)	
Working Temperature	0~+55	0~+55	-20~+65	°C
Weight	≤800	≤800	≤800	g
Dimensions: Tolerance:(±0.5mm, 0.02in)	4.01 x 1.73 x 1.45 102 x 44 x 37	4.01 x 1.73 x 1.45 102 x 44 x 37	50.8 x 63.5 x 127 2.0x2.5x5.0 in	in mm

Tuning control port definition:

DB-25P PIN No.	Definition	NOTE	DB-25P PIN No.	Definition	NOTE
1	D11	MSB	14	+15V (DC)	Power supply
2	D10	DB	15	Null	External use forbidden
3	D9	DB	16	-15V (DC)	Power supply
4	D8	DB	17	Null	External use forbidden
5	D7	DB	18	Common	±15V Grounded
6	D6	DB	19	Null	External use forbidden
7	D5	DB	20	ground	Grounded
8	D4	DB	21	24V (DC) positive pole	Heater source
9	D3	DB	22	24V (DC) negative pole	24V (DC) Grounded
10	D	DB	23	Null	External use forbidden
11	D1	DB	24	Null	External use forbidden
12	D0	LSB	25	Null	External use forbidden
13	Null	External use forbidden			

6 to 18GHz, 200-500MHz Bandwidth, YIG Bandpass Filter

Part number: RYBPF-6-18-450M-SMAf-15v-idd-i3

Description

Wide working frequency range, broad 3dB bandwidth, good linearity. Great selectivity of the external signal within the working frequency range. Digital drive circuits designed in the purpose of digital tuning. Widely used in test equipments and receivers.

• **Usage**

1. Application:

Applicable in the front-end of RF amplifiers used in the receiving system or test equipments.

2. Usage:

- ① 4 mounting holes (M4) at the bottom of each product, for installing.
- ② Connect the power and control line according to Table 2, check before power is switched on.
- ③ SMA (f) connectors used in I/O ports, for microwave signal, follow the mark when connecting.
- ④ Component becomes stabilized 3minutes after power is on. The working freq starts when the 12 bit digital driver is all-0 state, ends when it's all-1 state. Other frequency points are determined by relative digit code.
- ⑤ ±15V is the working voltage of the digital driver, the ripple of voltage should be less than 10mv.

3. Note:

- No shock or impact,
- The screws should not be removed under any circumstances.
- To not affect products' appearance and electrical performance. Please avoid any direct contact with ethanol, acetone, acid, alkali and saline chemical.

• **Maintenance and Storage**

- 1. Storage temperature is -20~+60°C.
- 2. If there is any problem, please contact us. Please don't disassemble the product by yourself.

Appendix

NO	12 Bit Control Code	Ins	Relative Freq(GHz)
1	0000 0000 0000	Digital Control	6.0
2	0100 0000 0000	Digital Control	9.0
3	1000 0000 0000	Digital Control	12.0
4	1011 1111 1111	Digital Control	15.0
5	1111 1111 1111	Digital Control	18.0