

Band Reject YIG Filters

6-Stage / 8-Stage
Octave and Multioctave
Integral Drivers
Dual Tracking



APPLICATIONS

- Spectrum Analyzers
- Sweep Generators
- ECM Receivers
- Frequency Synthesizers
- Broadband Test Equipment

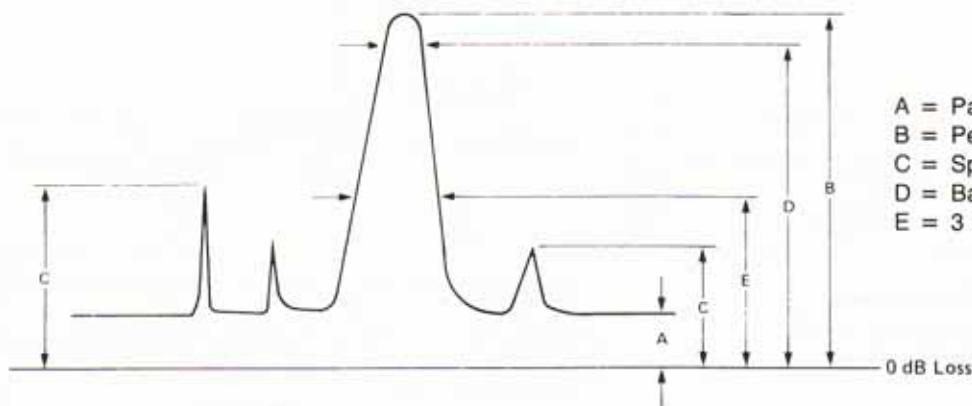
FEATURES

- Low Insertion Loss – 1.0 dB in Some Models
- Frequency vs. Temperature Stability as Low as 200 KHz/°C
- Repeatable RF Performance from Unit to Unit
- Package Sizes Typically 1.4 inch³
- Qualification to MIL-E-5400, Class II Specification Available

OMNIYIG's newest standard line of Band Reject YIG Filters are electronically tunable in octave and/or multioctave frequency range from 500 MHz to 18 GHz. Over 20 years of experience in YIG development has resulted in improved designs which exhibit excellent performance. Proprietary production techniques enable OMNIYIG to give each customer higher quality YIG Band Reject Filters at very attractive prices. These compact packaged solid-state devices provide

outstanding tuning linearity over one to five octave bands. Analog drivers and TTL drivers are available as integrated parts to the YIG Filter. Besides the standard line, OMNIYIG manufactures many special designs of Band Reject Filters, YIG Oscillators, Discriminators, YIG Bandpass Filters and other YIG designs. All devices can be qualified to MIL-E-5400, Class II specification.

PARAMETER DEFINITIONS



- A = Passband Insertion Loss
- B = Peak Rejection
- C = Spurious Response Rejection
- D = Bandwidth at 40 dB Rejection
- E = 3 dB Bandwidth

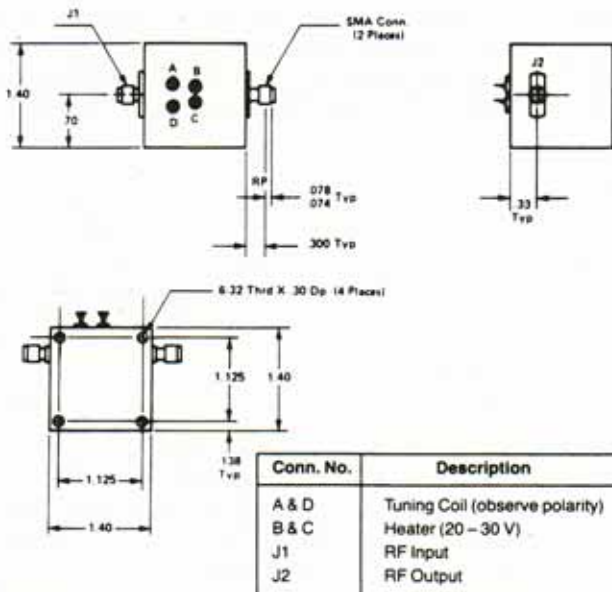
STANDARD OCTAVE BANDS⁶

Type ^{1,4}	OMNIYIG Model No. ²	Frequency Range (GHz)	3dB BW Max. (MHz)	Insertion Loss Max. (dB)	Bandwidth at 40 dB ³ (MHz)	Off Resonance Spurious Minimum (dB)	Frequency Drift 0° to 60°C (MHz)	Dimensions Cubed (Inches)	Weight (Oz.)	Outline
6-Stage	P106RX	0.5 – 1.0	160	1.0	10	4	5	1.4	9.8	A
	L106RX	1.0 – 2.0	160	1.5	10	4	5	1.4	9.8	A
	S106RX	2.0 – 4.0	175	1.5	15	4	5	1.4	9.8	A
	C106RX	4.0 – 8.0	175	1.5	20	4	9	1.4	9.8	A
	X106RX	8.0 – 12.4	190	1.5	20	4	10	1.69	17.5	B
	Ku106RX	12.4 – 18.0	190	1.5	20	4	12	1.69	17.5	B
8-Stage	P108RX	0.5 – 1.0	125	1.0	15	4	5	1.4	9.8	A
	L108RX	1.0 – 2.0	125	1.5	15	4	5	1.4	9.8	A
	S108RX	2.0 – 4.0	135	1.5	35	4	5	1.4	9.8	A
	C108RX	4.0 – 8.0	150	1.5	35	4	9	1.4	9.8	A
	X108RX	8.0 – 12.4	150	1.5	35	4	10	1.69	17.5	B
	Ku108RX	12.4 – 18.0	150	1.5	35	4	12	1.69	17.5	B

STANDARD MULTI-OCTAVE BANDS⁶

6-Stage	M102RX	4.0 – 12.4	180	1.5	10	5	13	1.69	17.5	B
8-Stage	M103RX	4.0 – 12.4	150	1.5	15	5	13	1.69	17.5	B
6-Stage	M104RX	4.0 – 18.0	220	1.5	8 ⁷	5	13	1.69	17.5	B
6-Stage	M105RX	2.0 – 8.0	190	1.5	10	4	13	1.4	9.8	B
6-Stage	M106RX	1.0 – 4.0	195	1.5	10	5	13	1.4	9.8	A
6-Stage	M107RX	8.0 – 18.0	200	1.5	20	5	13	1.69	17.5	B

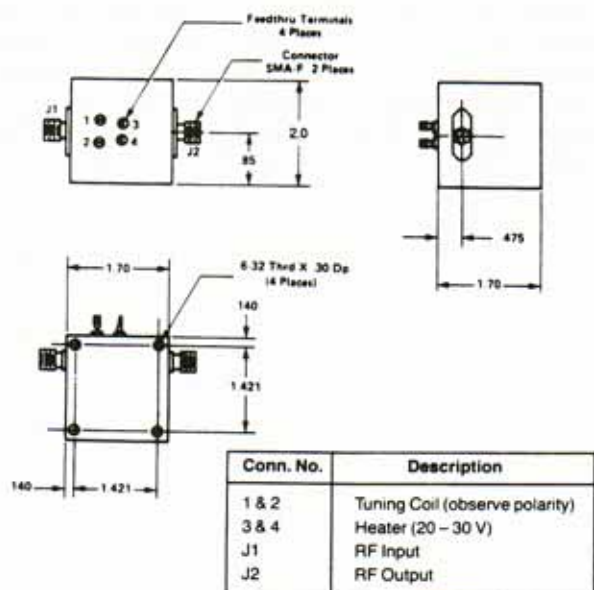
OUTLINE A



NOTES:

- ¹ All connectors are standard 3mm (SMA) female.
- ² Limiting levels for all units is greater than +10 dBm.
- ³ Nominal bandwidths; other bandwidths are available.
- ⁴ Deviation from linear $\pm 0.1\%$.

OUTLINE B



⁵ Sweeping time required for bandpass to stabilize within 0.2% of full band step.

⁶ All units can be qualified to MIL-E-5400, Class II specification or special order.

⁷ 3 MHz below 5 GHz.