



500MHz to 18GHz YIG Filters

STANDARD OCTAVE BANDS⁽⁶⁾

TYPE ^{1,8}	OMNIYIG MODEL No. ³	FREQ RANGE (GHz)	INSERTION LOSS (dB)	BANDWIDTH at 3dB ⁴ (MHz)	OFF RESONANCE SPURIOUS MINIMUM (dB)	COMBINED PASSBAND RIPPLE & SPUR MAX (dB)	FREQ DRIFT 0° TO 60°C (MHz)	OFF RESONANCE ISOLATION MINIMUM (dB)	DIMENSIONS CUBED (INCHES)	WEIGHT (oz)	FREQ TRACKING BETWEEN CHANNELS (MHz)	DRAWING NUMBER
2-STAGE	P102	0.5-1.0	4.0	17-30	30	1.0	5	45	1.4	9.8	-	01
	L102	1.0-2.0	3.5	24-35	30	1.5	5	45	1.4	9.8	-	01
	S102	2.0-4.0	2.5	25-40	25	1.5	5	50	1.4	9.8	-	01
	C102	4.0-8.0	2.5	25-40	25	1.5	9	50	1.4	9.8	-	01
	X102	8.0-12.4	2.5	25-40	25	1.5	10	50	1.69	17.5	-	02
	Ku102	12.4-18.0	2.5	30-45	25	1.5	12	45	1.69	17.5	-	02
3-STAGE	P103	0.5-1.0	5.0	14-25	35	1.0	5	70	1.4	9.8	-	01
	L103	1.0-2.0	3.5	20-35	35	1.5	5	70	1.4	9.8	-	01
	S103	2.0-4.0	3.0	20-35	30	1.5	5	70	1.4	9.8	-	01
	C103	4.0-8.0	3.0	25-40	30	1.5	9	70	1.4	9.8	-	01
	X103	8.0-12.4	3.0	25-40	30	1.5	10	70	1.69	17.5	-	02
	Ku103	12.4-18.0	3.5	30-45	30	1.5	12	65	1.69	17.5	-	02
4-STAGE	P104	0.5-1.0	6.0	12-23	38	1.0	5	80	1.4	9.8	-	01
	L104	1.0-2.0	4.5	20-35	38	1.5	5	80	1.4	9.8	-	01
	S104	2.0-4.0	4.0	20-35	38	1.5	5	80	1.4	9.8	-	01
	C104	4.0-8.0	4.0	25-40	38	1.5	9	80	1.4	9.8	-	01
	X104	8.0-12.4	4.0	25-40	38	1.5	10	80	1.69	17.5	-	02
	Ku104	12.4-18.0	4.0	28-45	38	1.5	12	80	1.69	17.5	-	02
DUAL 2-STAGE (Per Channel)	P1022	0.5-1.0	3.5	17-30	30	1.0	5	45	1.4	9.8	5	03
	L1022	1.0-2.0	3.5	24-35	30	1.5	5	45	1.4	9.8	6	03
	S1022	2.0-4.0	2.5	25-40	25	1.5	5	50	1.4	9.8	6	03
	C1022	4.0-8.0	2.5	25-40	25	1.5	9	50	1.4	9.8	7	03
	X1022	8.0-12.4	2.5	25-40	25	1.5	10	50	1.69	17.5	8	04
	Ku1022	12.4-18.0	2.5	30-45	25	1.5	12	45	1.69	17.5	7	04

STANDARD MULTI-OCTAVE BANDS⁽⁶⁾

2-STAGE	M102 ⁵	1.0-12.4	5.0	25-60	25	2.5	13	50	1.69	17.5	-	02
3-STAGE	M103 ⁵	1.0-12.4	6.5	25-60	33	2.5	13	70	1.69	17.5	-	02
4-STAGE	M104B			25-60		2.5	13	80	1.69	17.5	-	02
DUAL 2-ST.	M1022			25-55		2.0	13	50	1.69	17.5	10	04
3-STAGE	M203 ⁵			25-70		2.5	13	70	1.69	17.5	-	02
2-STAGE	M1611			25-65		2.5	13	52	1.69	17.5	-	02
4-STAGE	M1612			25-65		2.5	13	80	1.69			

YIG FILTERS FAST SWITCHING (<300mSecs.)⁽⁶⁾⁽⁷⁾

2-STAGE	P102F	0.5-1.0	5.5	17-30	30	1.5	7	50	1.7	18	-	02
	L102F	1.0-2.0	3.5	25-40	25	1.5	7	50	1.7	18	-	02
	S102F	2.0-4.0	3.0	20-35	25	1.5	10	50	1.7	18	-	02
	C102F	4.0-8.0	2.5	25-40	25	1.5	12	50	1.7	18	-	02
	X102F	8.0-12.4	2.5	25-40	25	1.5	12	45	1.7	18	-	02
4-STAGE	P104F	0.5-1.0	5.0	12-23	38	1.75	7	80	1.7	18	-	02
	L104F	1.0-2.0	5.0	20-40	38	1.75	7	80	1.7	18	-	02
	S104F	2.0-4.0	4.0	20-40	38	1.75	10	80	1.7	18	-	02
	C104F	4.0-8.0	4.0	20-40	38	1.75	12	80	1.7	18	-	02
	X104F	8.0-12.4	4.0	20-40	38	1.75	12	80	1.7	18	-	02
DUAL 2-STAGE (Per Channel)	P1022F	0.5-1.0	3.5	17-30	30	1.5	7	50	1.7	18	4	04
	L1022F	1.0-2.0	3.5	20-40	25	1.5	7	50	1.7	18	6	04
	S1022F	2.0-4.0	3.0	20-35	25	1.5	10	50	1.7	18	7	04
	C1022F	4.0-8.0	2.5	25-40	25	1.5	12	50	1.7	18	8	04
	X1022F	8.0-12.4	2.5	25-40	25	1.5	12	45	1.7	18	9	04

NOTES:

- All connectors are standard 3mm (SMA) female.
- Maximum isolation between channels is 50 dB.
- Limiting levels for all units are greater than +10dBm.
- Nominal bandwidths, other bandwidths are available.
- Limiting level is -23 dBm from 1.0 to 1.8 GHz and greater than +10 dBm from 1.8 to 12.4 GHz
- Deviation from linear $\pm 0.1\%$
- Sweeping time required for bandpass to stabilize within 0.2% of full band step.
- All units can be qualified to MIL-E-5400, Class II Specification on special order.