Low Pass Filter

WGLL-00490-2012

50Ω DC to 490 MHz

Ver. A

2022.03.16

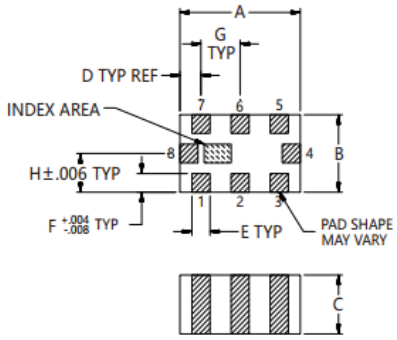
Maximum Rating

OperatingTemperature	-55℃~+125℃
StorageTemperature	-55℃~+125℃
RF Input Power	3.5W max at 25℃

Pin Connections

RF Input	8
RF Output	4
Ground	1,2,3,5,6,7

Outline Drawing

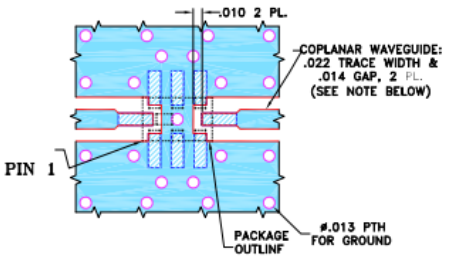


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	Wt.
.079	.049	.037	.014	.012	.012	.026	grams
2.00	1.25	0.95	0.35	0.30	0.30	0.65	.008

Note: Please refer to case style drawing for details

Demo Board MCL P/N: CG-2012
Suggested PCB Layout



NOTES:
1. COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).

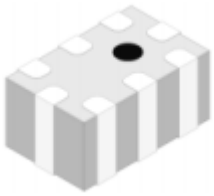
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

Features

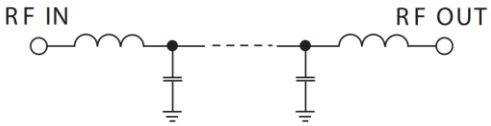
- High Performance
- Small Size
- Wide Band
- Ultra Low I.L.
- Temperature Stable
- LTCC Structure

Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use



RoHS Compliant



Functional Schematic

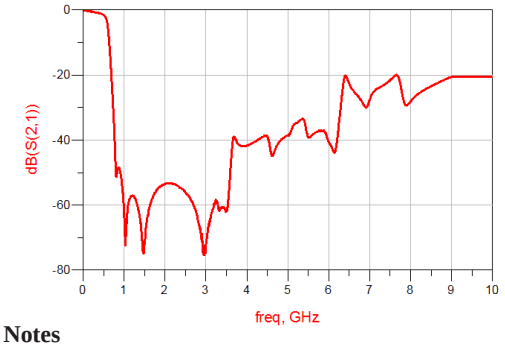
Electrical Specifications[(1)] at 25℃

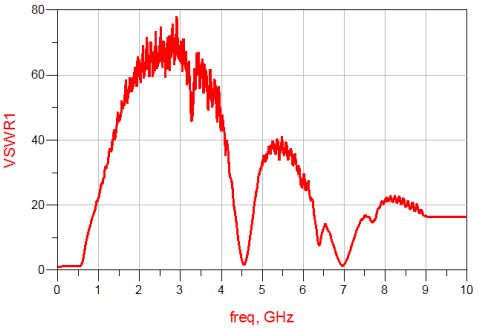
Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Insertion Loss	DC-490	-	1.5	2.0	dB
	Freq. Cut-off	570	-	3.0	-	dB
	VSWR	DC-490	-	1.5	-	:1
Stop Band	Rejection Loss	800-960	20	48	-	dB
		960-1500	35	50	-	dB
		1500-3000	35	50	-	dB
		8000-15000	-	20	-	dB

(1) Tested on Demo Board.

Typical Performance at 25℃

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.195	1.070
100	0.290	1.137
490	1.498	1.263
640	10.62	4.679
780	43.39	13.21
800	50.56	14.13
920	50.78	18.99
1000	62.31	22.30
1300	58.97	36.78
2000	53.45	61.49
2500	56.08	67.55
3000	72.06	68.88
4000	41.68	43.56
5000	38.41	32.36
6000	40.69	28.31





Notes

a. The specifications are tested at 25℃±5℃, relative humidity 55~75%.
b. Other quality and characteristic not specify in this datasheet.
Please contact us for detail requirements.

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