Band Pass Filter

WGLB-05100

50Ω 3100 to 7100 MHz

Ver. A

2022.08.28

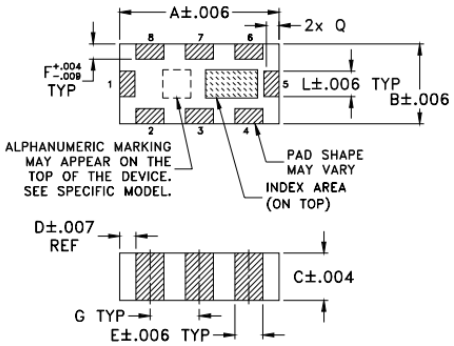
Maximum Rating

OperatingTemperature	-40℃~+85℃
StorageTemperature	-55℃~+00℃
RF Input Power	2W max at 25℃

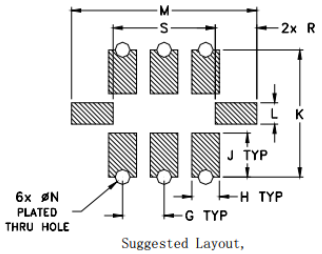
Pin Connections

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

Outline Drawing



PCB Land Pattern



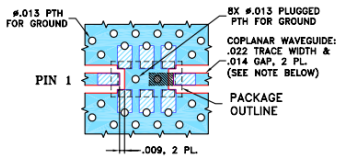
Suggested Layout,
Tolerance to be within±002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J
.126	.063	.037	.013	.022	.012	.039	.026	.041
3.20	1.60	0.94	0.33	0.56	0.30	0.99	0.66	1.04

K	L	M	N		P	Q	R	S
.119	.020	.174	.014	--	.012	.039	.096	grams
3.02	0.51	4.42	0.36	--	0.30	0.99	2.44	.017

Demo Board MCL P/N: T-51
Suggested PCB Layout (PL-138)



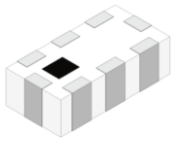
NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

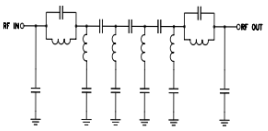
- High Performance
- Small Size
- Wide Band
- Ultra Low I.L.
- Temperature Stable
- LTCC Structure

Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use



RoHS Compliant



Functional Schematic

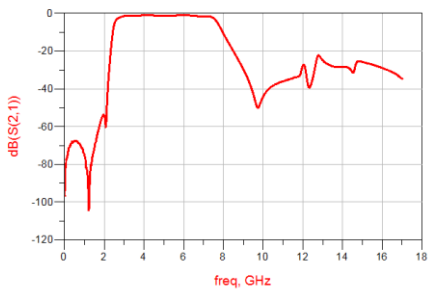
Electrical Specifications[(1)] at 25℃

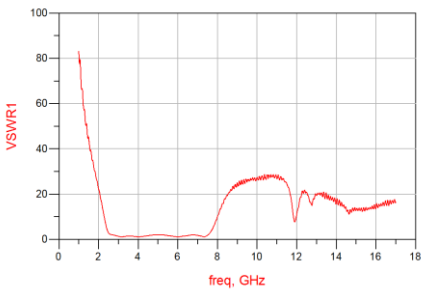
Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Center Frequency	-	-	5100	-	MHz
	Insertion Loss	3100-7100	-	1.5	2.1	dB
	VSWR	3100-7100	-	2.0	-	:1
Stop Band	Rejection Loss	DC-2100		25	-	dB
		9500-17000		20	-	dB

(1) Test on our Demo Board.

Typical Performance at 25℃

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	77.27	110.3
1000	74.46	82.98
2000	54.10	22.11
2500	5.89	2.846
3100	1.24	1.089
5100	1.39	1.973
6000	0.94	1.058
7100	1.58	1.587
9000	29.67	25.01
9500	42.84	25.19
10000	44.06	27.13
11000	36.01	26.76
12000	27.65	10.88
15000	25.73	12.74
17000	34.71	16.37





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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