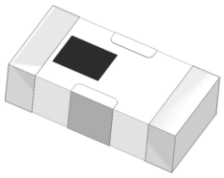
Band Pass Filter

WGLB-01575

50Ω 1530 to 1620 MHz

Ver. A

2024.06.16



RoHS Compliant

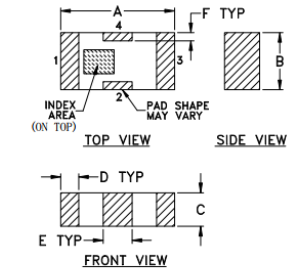
Maximum Rating

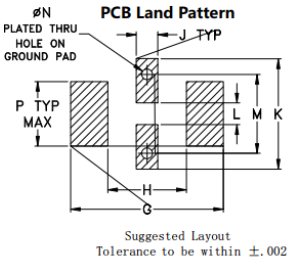
OperatingTemperature	-55℃~+100℃
StorageTemperature	-55℃~+100℃
RF Input Power	1.5W max at 25℃

Pin Connections

RF Input	1
RF Output	3
Ground	2,4

Outline Drawing



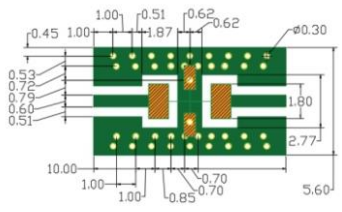


Outline Dimensions(mm Tolerance)

A	B	C	D	E	F	G
3.20 ±0.2	1.60 ±0.2	0.95 ±0.2	0.51 ±0.1	0.81 ±0.1	0.23 ±0.1	4.29

H	J	K	L	M	N	P	wt
2.21	0.61	3.10	0.61	2.21	0.30	1.8	.020

Demo Board MCL P/N: T-39
Suggested PCB Layout (PL-137)



NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & 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)

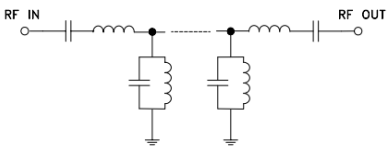
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

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

Application

- Harmonic Rejection
- Transmitters/Receivers
- Base Station of Mobile Communication
- Lab Use



Functional Schematic

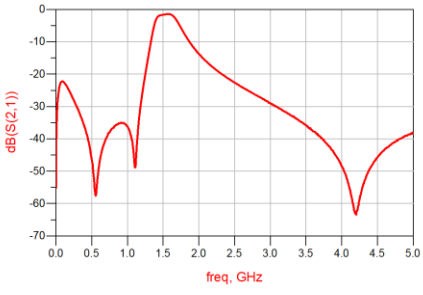
Electrical Specifications(1) at 25℃

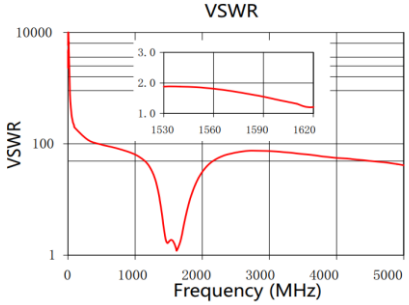
Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Center Frequency	-	-	1575	-	MHz
	Insertion Loss	1530-1620	-	-	3.0	dB
	VSWR	1530-1620	-	-	2.5	:1
Stop Band	Rejection Loss	DC-1200	-	20	-	dB
		2800-5200	-	25	-	dB

(1) Tested on Demo Board.

Typical Performance at 25℃

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.3	66.27	2309
300	36.19	116.9
900	36.42	71.69
1050	38.82	59.41
1150	46.97	48.27
1280	22.49	26.70
1405	7.3	4.82
1480	2.76	1.65
1530	2.47	1.88
2220	20.01	54.29
2400	23.53	65.60
2800	30.79	75.11
3100	37.82	72.94
3500	49.66	65.41
5200	29.49	26.75





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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