

LTCC

High Pass Filter

50Ω 2400 to 2500 MHz

Features

- Miniature size 0603
- High stop band rejections
- Low cost
- Aqueous washable

Applications

- ISM Band
- WLAN
- Bluetooth
- Zigbee

HPJC-252R+



Generic photo used for illustration purposes only

CASE STYLE: JC0603C-4

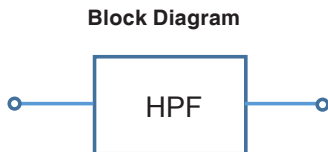
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 3000



Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss ¹	2400 - 2500	—	1.0	1.4	dB
	VSWR	2400 - 2500	—	1.5	1.7	:1
Stop Band	Rejection Loss	500-1917	—	35	—	dB
		1917	18	25	—	

1. Tested on Evaluation Board TB-1025+

Maximum Ratings

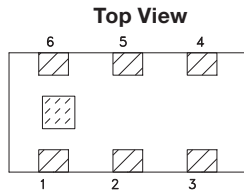
Operating Temperature	-40°C to 85°C
Storage Temperature ²	-40°C to 85°C
RF Power Input ³	2W at 25°C

2. Refer to product storage temperature after installation

Suggestion for T&R unused product storage condition:

+5 ~ +35 °C, Humidity 45~75%RH, 12 month Max

3. Derate linearly to 1W at 85°C.

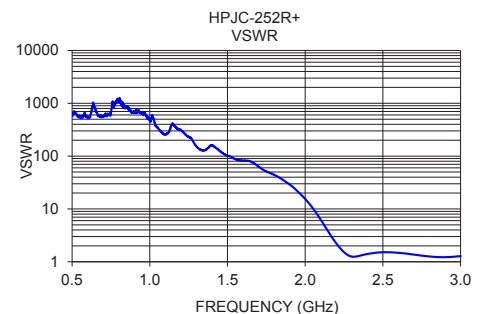
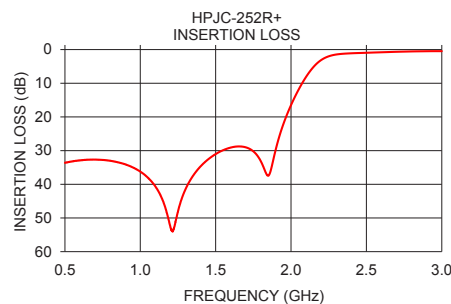


Pad Connections

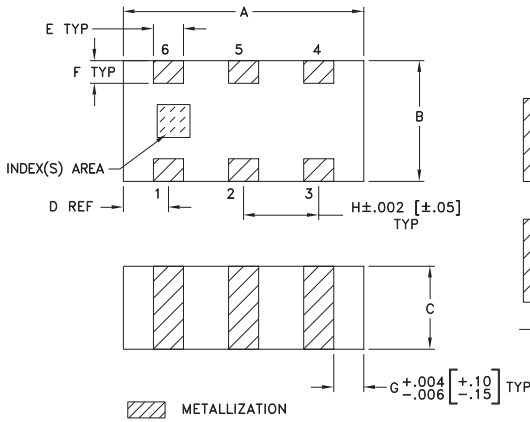
Input	1
Output	3
Ground	2,5
No Connection	4,6

Typical Performance Data at 25°C

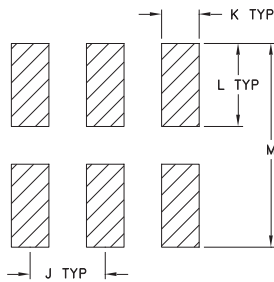
Frequency (GHz)	Insertion Loss (dB)	VSWR (:1)
0.50	33.63	589.33
1.00	36.24	467.00
1.50	31.02	100.87
1.917	26.58	26.60
2.00	16.47	15.45
2.30	1.46	1.25
2.40	1.10	1.40
2.45	1.02	1.48
2.50	0.95	1.52
2.60	0.80	1.48
3.00	0.47	1.29



Outline Drawing

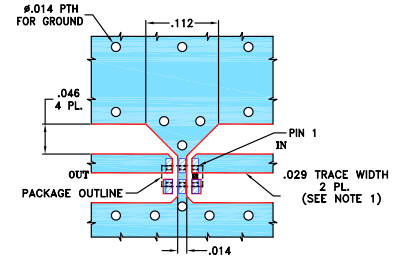


PCB Land Pattern



Suggested Layout,
Tolerance to be within .002

Evaluation Board MCL P/N: TB-1025+ Suggested PCB Layout (PL-553)



NOTES:

1. TRACE WIDTH IS SHOWN FOR FR4, GRADE IT-180TC (ITEQ CORP.) WITH DIELECTRIC THICKNESS .016±.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.

Outline Dimensions ($\frac{\text{inch}}{\text{mm}}$)

A	B	C	D	E	F	G
.063	.032	.022	.012	.008	.006	.008
1.60	0.81	0.56	0.30	0.20	0.15	0.20
H	J	K	L	M	wt	
.020	.020	.010	.022	0.053	grams	
0.51	0.51	0.25	0.56	1.35	.005	

Additional Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp