LTCC

High Pass Filter

HPJC-492R+

50Ω 4900 to 5850 MHz

Generic photo used for illustration purposes only

CASE STYLE: JC0603C-7

+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

Features

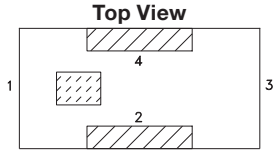
- Miniature size 0603
- Low Insertion Loss, 0.5 typ.
- Low cost
- Aqueous washable

Applications

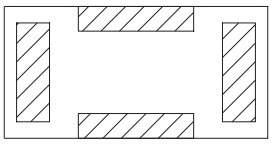
- ISM Band
- WLAN
- Bluetooth
- Zigbee

Block Diagram

Top View



Bottom View



Pad Connections

Input	1
Output	3
Ground	2,4

Electrical Specifications at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss[1]	4900 - 5850	—	0.5	0.9	dB
	VSWR	4900 - 5850	—	1.2	2.0	:1
Stop Band	Rejection Loss	500 - 2400	—	25	—	dB
		2400 - 2500	25	36	—	

1. Tested on Evaluation Board TB-1027+

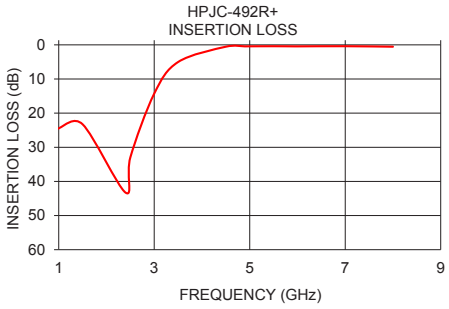
Maximum Ratings

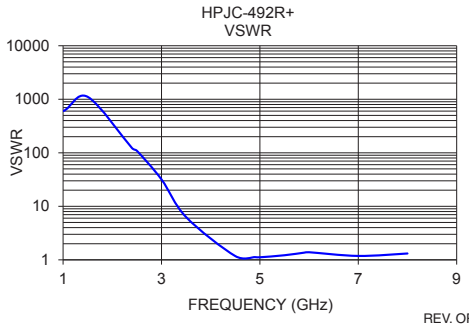
Operating Temperature	-40°C to 85°C
Storage Temperature[2]	-40°C to 85°C
RF Power Input[3]	2W at 25°C

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.

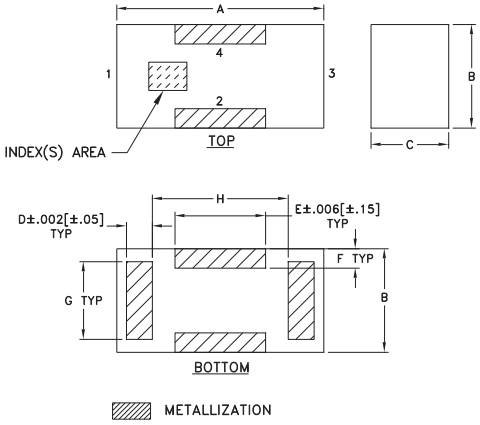
Typical Performance Data at 25°C

Frequency (GHz)	Insertion Loss (dB)	VSWR (:1)
0.50	29.47	627.15
1.00	24.45	604.00
1.50	23.27	1110.07
2.40	43.28	122.82
2.50	32.96	109.17
3.00	14.28	31.83
3.50	5.03	6.30
4.50	0.54	1.18
4.90	0.44	1.12
5.00	0.43	1.12
5.50	0.40	1.22
5.90	0.44	1.36
6.00	0.44	1.39
7.00	0.40	1.18
8.00	0.54	1.31

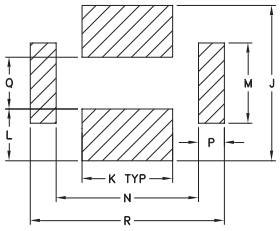




Outline Drawing

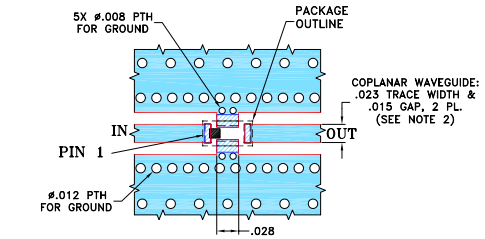


PCB Land Pattern



Suggested Layout,
Tolerance to be within .002

Evaluation Board MCL P/N: TB-1027+
Suggested PCB Layout (PL-565)



NOTES:

1. PCB IS MULTILAYER PCB, SEE STACK-UP DIAGRAM.
2. TRACE WIDTH & GAP PARAMETERS ARE SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .008"±.001"; COPPER: 1/2 OZ. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
3. LAYER 3 AND LAYER 4 OF THE PCB ARE CONTINUOUS GROUND PLANES.

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

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J
.063	.032	.024	.008	.028	.006	.024	.041	.047
1.60	0.81	0.61	0.20	0.71	0.15	0.6096	1.04	1.19

K	L	M	N	P	Q	R	wt
.028	.016	.024	.043	.008	.016	0.059	grams
0.71	0.41	0.61	1.09	0.20	0.41	1.50	.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 test performance criteria and measurement instructions.

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