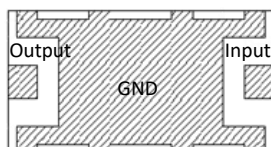


Description

The YCPB052 is a low temperature co-fired ceramic (LTCC) Band Pass Filter designed for high performance in various applications. The small part size allow for high density PCB layout, provide excellent solderability.

The YCPB052 is particularly well-suited for wireless transmitters or receivers.



Applications

- ◆ Satellite applications
- ◆ Narrow & Wideband amplifiers
- ◆ Factory and Process automation
- ◆ ISM Band

Features

- ◆ 4.8 – 5.6GHz
- ◆ Low Insertion Loss
- ◆ High rejection out-of-band
- ◆ Surface Mount Type
- ◆ Small size 3.2mm x 1.6mm

Electrical Specification

Parameter ¹⁾	Specification			Conditions	Unit
	Min.	Typ.	Max.		
Frequency	4.8	-	5.6	-	GHz
Insertion Loss	-	2.2	2.7	@ 4.8 – 5.6GHz	dB
Ripple	-	0.6	1.0	@ 4.8 – 5.6GHz	dB
Return Loss	10	12	-	@ 4.8 – 5.6GHz	dB
Attenuation	40	42	-	@ 4.2GHz	dB
	40	42	-	@ 6.2GHz	dB
Operation Temperature Range	-40	-	85	-	°C

Notes:

1) Ta = 25°C, 50Ω system, unless otherwise noted.

Recommended Operating Condition

Parameter	Min	Typ	Max	Units
Operating Temperature	-40	25	85	°C
Storage Temperature ¹⁾	-20		35	°C

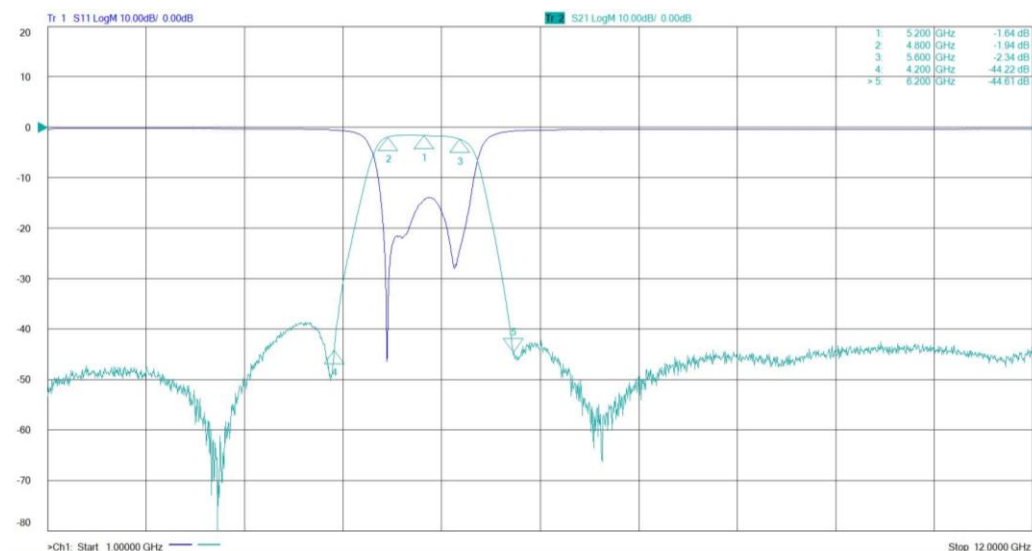
Notes:

1) Storage Temperature Range before soldering in taping package.

Absolute Maximum Ratings

Parameter	Rating	Units
Input Power (AVG/CW)	TBD	W

Performance Plots : Measured Data²⁾

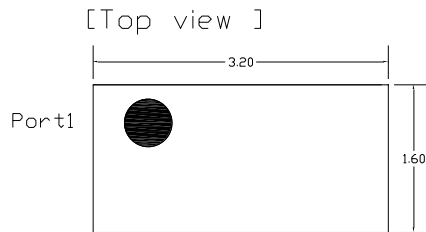


Marker	Frequency (GHz)	Value (dB)
M1	5.2	-1.64
M2	4.8	-1.94
M3	5.6	-2.34
M4	4.2	-44.2
M5	6.2	-44.6

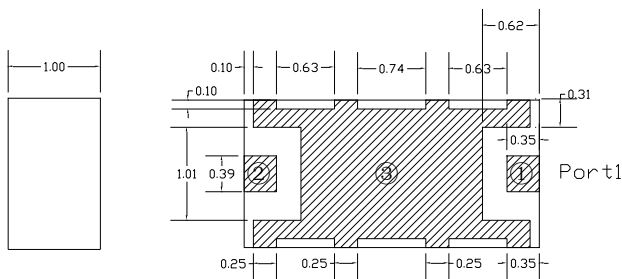
Notes:

2) The resulting value in this graph includes the PCB's transmission line loss of 0.24dB.

Package Outline Drawing



[Unit : mm]

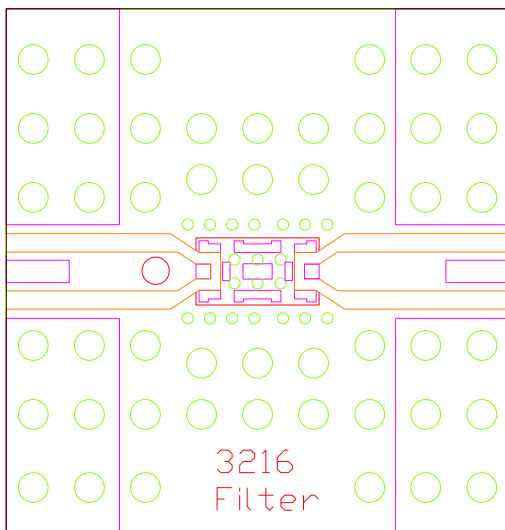


Terminal Function	
①	Input
②	Output
③	GND

[Side view]

[Bottom view]

Evaluation Board PCB Information ³⁾



Notes:

3) RO4350B 20mil, 0.5oz. This PCB drawing CAD file can be provided.