

Description

The YCPL092 is a low temperature co-fired ceramic (LTCC) Low Pass Filter designed for high performance in various applications. The small part size allow for high density PCB layout, provide excellent solderability.



Applications

- ◆ 5G mmWave applications
- ◆ Narrow & Wideband amplifiers
- ◆ Factory and Process automation
- ◆ Test Instrumentation
- ◆ Satellite communication

Features

- ◆ DC – 9170MHz
- ◆ Low Insertion Loss
- ◆ High rejection out-of-band
- ◆ Surface Mount Type
- ◆ RoHS compliance

Electrical Specification

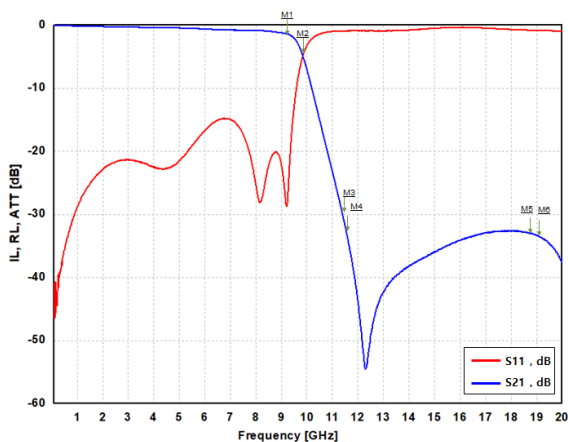
Parameter ¹⁾	Specification			Conditions	Unit
	Min.	Typ.	Max.		
Pass Band	DC	-	9170	-	MHz
Cut-Off Frequency	-	9800	-	@Insertion Loss = -3dB	MHz
Insertion Loss	-	1	3	-	dB
VSWR	-	1.6	2	-	dB
Attenuation	20	30	-	@ 11360– 19000MHz	dB
	28	36	-	@ 11630 – 18770MHz	dB
Power Capacity		8		@ 85°C	W
Operation Temperature Range	-55	-	105	-	°C

Notes:

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

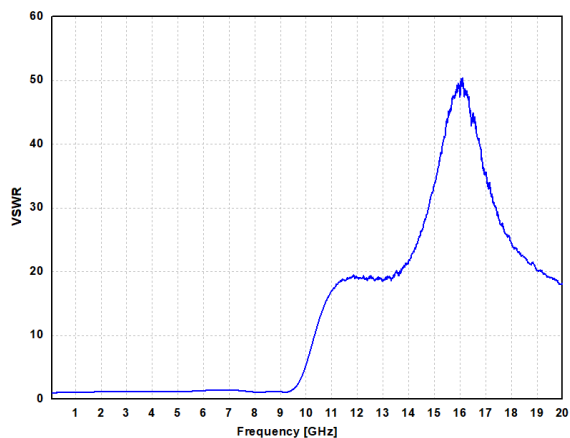
Performance Plots

Insertion Loss, Attenuation & Return Loss



Marker	Frequency [GHz]	Value [dB]	Marker	Frequency [GHz]	Value [dB]
M1	9.17	-1.34	M4	11.63	-33.4
M2	9.8	-3.5	M5	18.77	-32.4
M3	11.36	-27.4	M6	19.0	-32.4

VSWR



Recommended Operating Condition

Parameter	Min	Typ	Max	Units
Operating Temperature	-55	25	105	°C
Storage Temperature	-20		35	°C

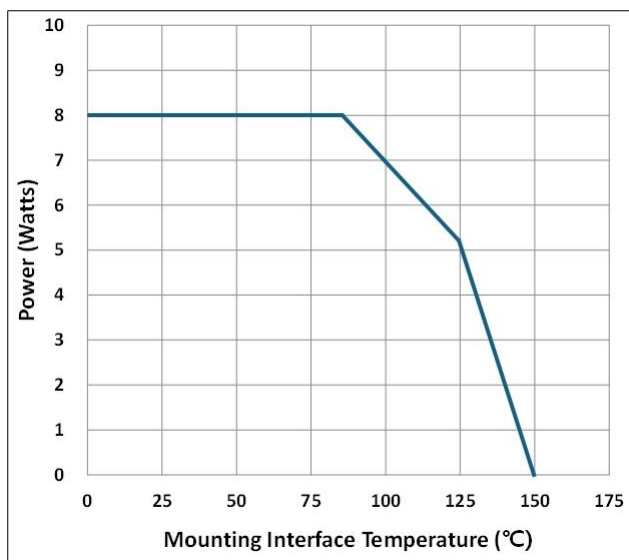
Notes:

1) Storage Temperature Range before soldering in taping package.

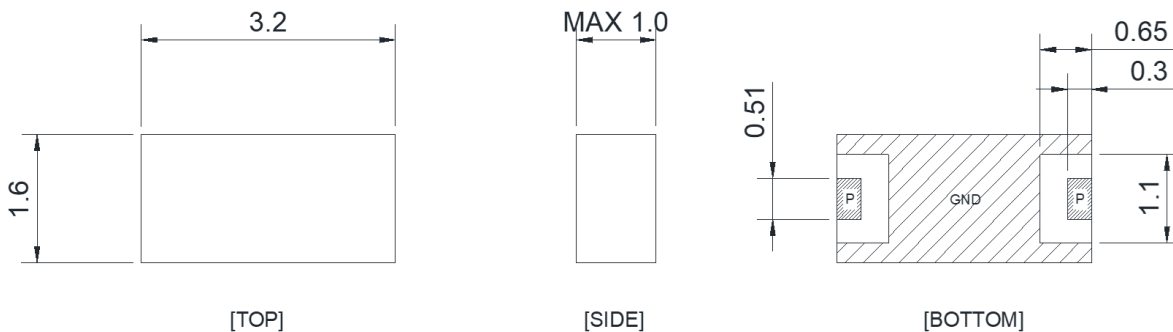
Absolute Maximum Ratings

Parameter	Rating	Units
Input Power (AVG/CW)	8	W

Power Derating Curve



Package Outline Drawing



Unit : mm
Tolerance : +/- 0.15