LDBPF0452-9090-V02

Multilayer Filter Combination

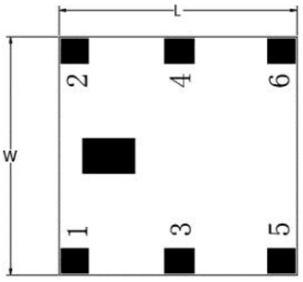
Features

- Multilayer monolithic construction yields high reliability
- Low insertion loss and small size SMD chip design
- Can simplify your complex tuning and circuit design
- LTCC process

Specifications

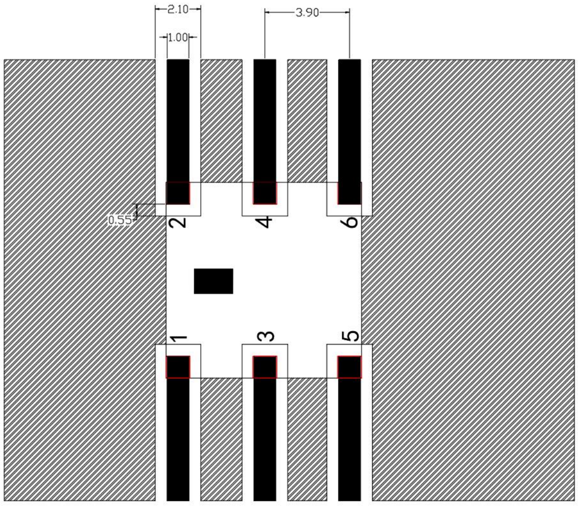
NO.	Specification				
			LPF1	LPF2	LPF3
1	Frequency range (MHz)		225~330	330~480	480~678
2	Insertion Loss (dB) @25℃		≤1.1	≤0.8	≤0.8
3	VSWR (In BW)		≤1.6	≤1.5	≤1.5
4	Ripple		≤0.8	≤0.6	≤0.6
5	Impedance (Ω)		50	50	50
6	Attenuation (dB)	450~990MHz	≥50	-	-
		660~1440 MHz	-	≥50	-
		960~2034MHz	-	-	≥50
7	Power(W)		5W		
Operating & Storage Condition (Component) Operation Temperature Range: -40℃ ~ +85℃ Storage Temperature Range: -40℃~ +85℃					
Storage Condition before Soldering (Included packaging material) Storage Temperature Range: +5 ~ +40 ℃ Humidity: 30 to 70% relative humidity					

Construction

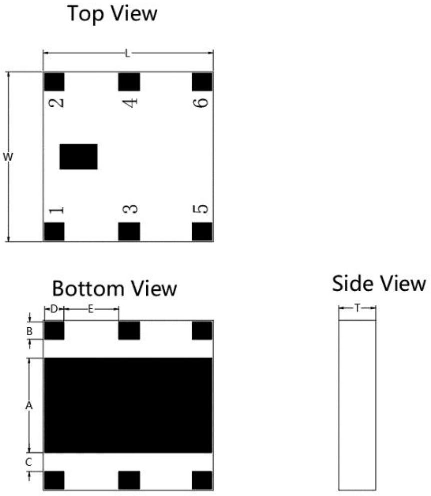


PIN	Connection	PIN	Connection
1	LPF1 input Port	2	LPF1 output Port
3	LPF2 input Port	4	LPF2 output Port

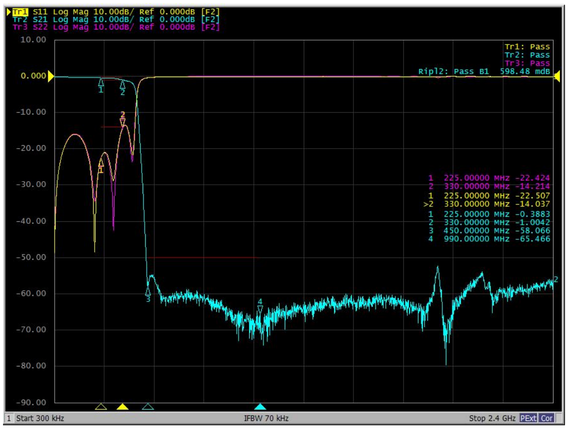
Mounting Considerations



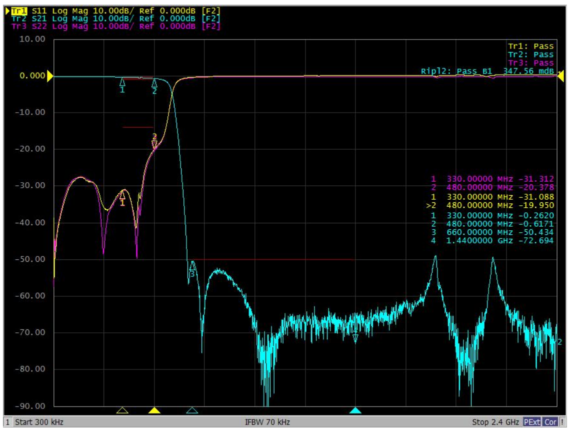
Dimensions

Figure	Symbol	Dimension (mm)
	L	9.00 ± 0.20
	W	9.00 ± 0.20
	T	2.50± 0.20
	A	5.00± 0.15
	B	0.92 ± 0.15
	C	1.00 ± 0.15
	D	1.10 ± 0.15
	E	2.90 ± 0.15

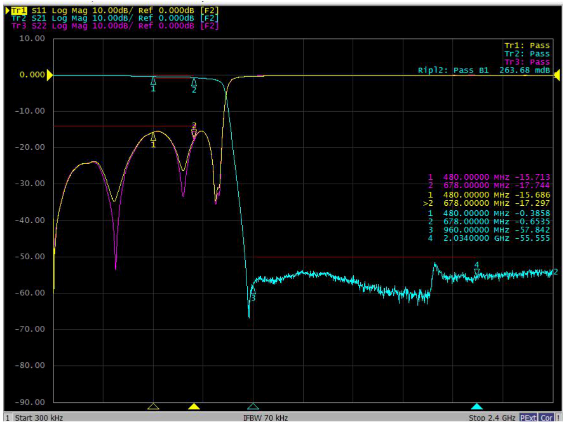
Typical Electrical Characteristics (T=25°C)



```
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F2]
Tr2 S21 Log Mag 10.00dB/ Ref 0.000dB [F2]
Tr3 S22 Log Mag 10.00dB/ Ref 0.000dB [F2]

Tr1: Pass
Tr2: Pass
Tr3: Pass
Ripl2: Pass B1  598.48 mdB

 1  225.00000 MHz -22.424
 2  330.00000 MHz -14.214
 1  225.00000 MHz -22.507
>2  330.00000 MHz -14.037
 1  225.00000 MHz -0.3883
 2  330.00000 MHz -1.0042
 3  450.00000 MHz -58.066
 4  990.00000 MHz -65.466
```

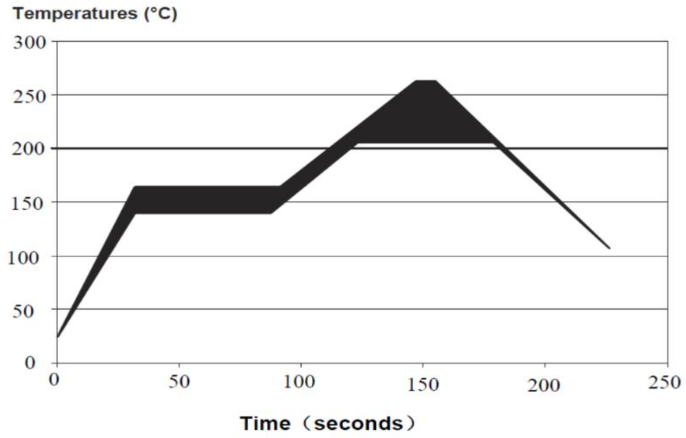


```
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F2]
Tr2 S21 Log Mag 10.00dB/ Ref 0.000dB [F2]
Tr3 S22 Log Mag 10.00dB/ Ref 0.000dB [F2]

Tr1: Pass
Tr2: Pass
Tr3: Pass
Ripl2: Pass B1  347.56 mdB

 1  330.00000 MHz -31.312
 2  480.00000 MHz -20.378
 1  330.00000 MHz -31.088
>2  480.00000 MHz -19.950
 1  330.00000 MHz -0.2620
 2  480.00000 MHz -0.6171
 3  660.00000 MHz -50.434
 4  1.4400000 GHz -72.694
```



```
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F2]
Tr2 S21 Log Mag 10.00dB/ Ref 0.000dB [F2]
Tr3 S22 Log Mag 10.00dB/ Ref 0.000dB [F2]

Tr1: Pass
Tr2: Pass
Tr3: Pass
Ripl2: Pass B1  263.68 mdB

 1  480.00000 MHz -15.713
 2  678.00000 MHz -17.744
 1  480.00000 MHz -15.686
>2  678.00000 MHz -17.297
 1  480.00000 MHz -0.3858
 2  678.00000 MHz -0.6535
 3  960.00000 MHz -57.842
 4  2.0340000 GHz -55.555
```

Solder Reflow Standard Conditioning



Storage Conditions

Temperature : **+5 to +30 ℃**

Humidity : **20 to 70% RH**

Term of storage : Within 12 months (After the delivery) *

Baking : **Unnecessary**

*** After peeling off cover tape, do not keep exposing the products to the open air. For the products stored longer than 12 months, confirm their terminals and solderability before use.**