LDIP4175-1608-V02

FR Diplexer

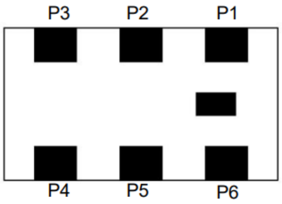
Features

- 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

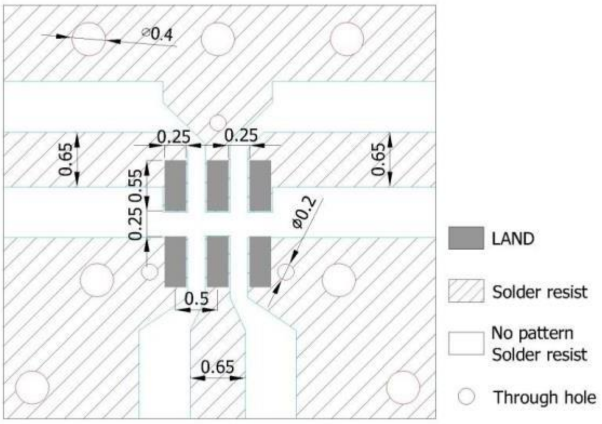
NO.	Specification		
1	Frequency range (MHz)	2400~2500 MHz	4900~5950 MHz
2	Insertion Loss (dB)	0.5 dB max. +25 ℃ 0.65 dB max. -40 ~ +85 ℃	0.6 dB max. +25 ℃ 0.75 dB max. -40 ~ +85 ℃
3	Attenuation (f1)	21 dB min. @4800~5000 MHz	27 dB min. @ 824~2170 MHz
		21 dB min. @5000~5950 MHz	30 dB min. @ 2400~2500 MHz
		25 dB min. @7200~7500 MHz	20 dB min. @ 9800~11900 MHz
4	Isolation	32 dB min.(35 dB typ.) @ 2400~2500 MHz 25 dB min.(27 dB typ.) @ 4900~6000 MHz	
5	VSWR (In BW)	2.0 max.	
6	Moisture sensitivity levels	LEVEL 1 (Refer to : IPC/JEDEC J-STD-020)	
7	HBM ESD	Pass 1KV on all pins (Base on AEC-Q200-002)	
8	MM ESD	Pass 200V (Base on EIA/JESD22-A115)	
9	Port Impedance	50Ω	
10	Power	2.0 W max.	
11	Operation Temperature Range	-40℃ ~ +85℃	

Construction



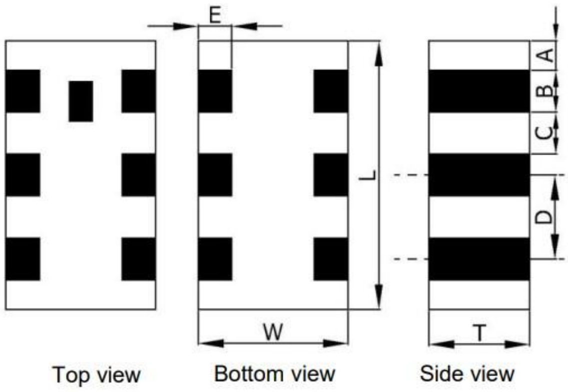
PIN	Connection	PIN	Connection
P1	Low Port	P4	GND
P2	GND	P5	Common Port
P3	Higher Port	P6	GND

Mounting Considerations

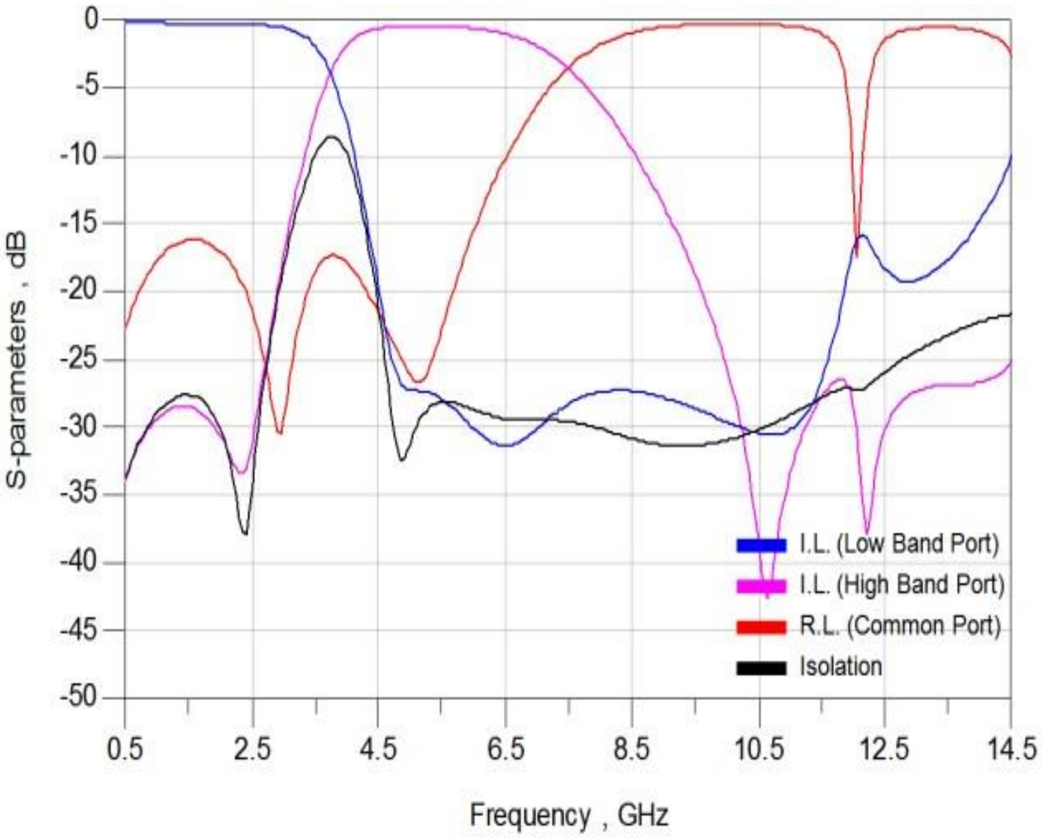


Unit: mm
Line width to be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness

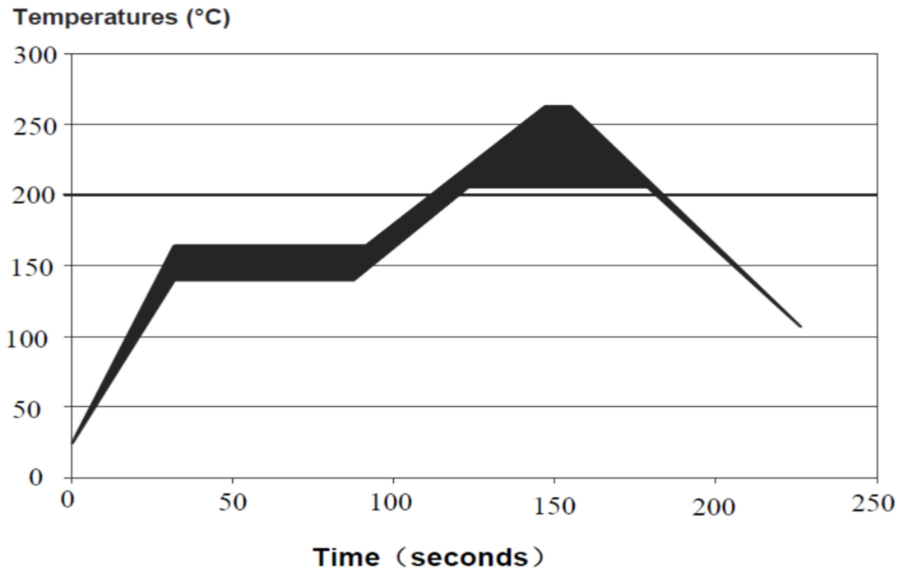
Dimensions

Figure	Symbol	Dimension (mm)
	L	1.60 ± 0.15
	W	0.80 ± 0.15
	T	0.60± 0.10
	A	0.175± 0.15
	B	0.25 ± 0.15
	C	0.25 ± 0.15
	D	0.50 ± 0.15
	E	0.20 ± 0.15

Typical Electrical Characteristics (T=25°C)



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 than12 months, confirm their terminals and solderability before use.**