

#### **Common Mode Filter**





#### **FEATURES**

- High reliability
- Excellent isolation voltage
- Effective anti-interference
- Good temperature characteristic (-40°C~+105°C)



The filter is suitable for applications that are sensitive to noise, such as analog circuits, and the EMC level can be significantly improved by adding a product to the input end of the power module.

Selection Guide											
Туре	Model	Inductance	Inductance	Current	DCR(mΩ)	Weight (g)	Size(mm)				
		(mH)(min)	(mH)(typ)	(A)(max)	(max)	(typ)	(L x W x H)				
Differential	FD2D-20-301	195	300	2	160	22	20.00 v 20.00 v 12.50 . Con Figure 1				
Mode Choke	FD2D-20-301					22	28.00 x 28.00 x 13.50 See Figure1				
Differential	FD2D-20-202	1300	2000	2	400	53	32.00 x 32.00 x 18.50 See Figure2				
Mode Choke	FD2D-20-202						32.00 x 32.00 x 18.50 See Figure2				
Differential	FD2D-40-202	1300	2000	4	230	79	40.00 x 40.00 x 20.00 See Figure3				
Mode Choke							40.00 x 40.00 x 20.00 See Figures				
Common	FL2D-20-562	3640*2	5600*2	2	60*2	10	21.00 x 11.00 x 20.50 See Figure4				
Mode Choke	FL2D-20-302					10					
Common	FL2D-20-103	6500*2	10000*2	2	70*2	16.5	23.00 x 14.00 x 23.00 See Figure5				
Mode Choke	FLZD-20-103	0300 2	10000 2	2	70"2	10.5	23.00 X 14.00 X 23.00 See Figures				
Common	FL2D-40-562	3640*2	5600*2	4	35*2	25	26.00 x18.00 x 24.50 See Figure6				
Mode Choke	FLZD-40-302						20.00 X10.00 X 24.30 See Figure0				

<b>General Spe</b>	cifications						
Item		Test Conditions	Min.	Тур.	Max.	Unit	
Operating Temperature *		-40		+105	°C		
Storage Temperature			-40		+105	C	
Storage Humidity		Non-condensing			95	%	
Inductance Error Range		fo=10KHz, Uo=0.1V,T=25°C		35		%	
Isolation Voltage (COIL-COIL)	FL2D-20-562				3000	VDC	
	FL2D-20-103	Electric strength test for 1 minute with a leakage current of 1mA max					
	FL2D-40-562	leakage current of fina max					
Vibration			10~55Hz, 10g, X,Y,Z direction ,2mm				
Warranty		Ambient temperature: <40°C	3 years				

Note: \*1.Operating Temperature range includes inductor self heating.

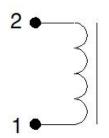
2. The dispensing advice added fixed when using this product.



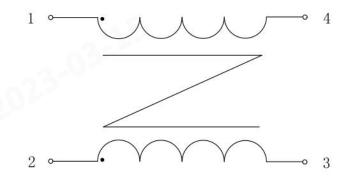
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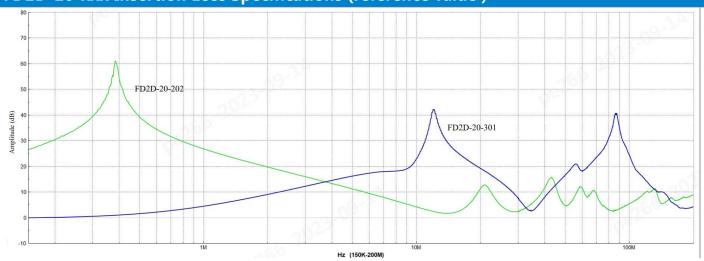
### **FD2D Series Schematic Diagram Of Pin Mark**



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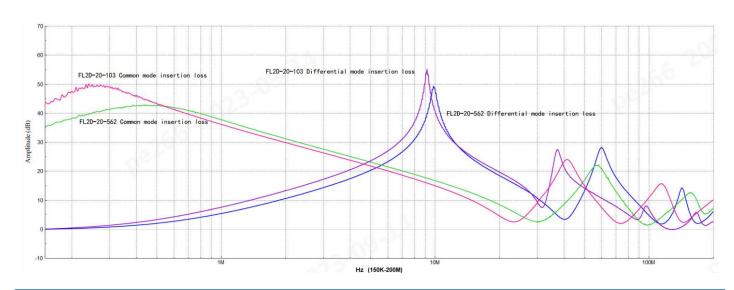


# FD2D-20-xxx Insertion Loss Specifications (reference value)

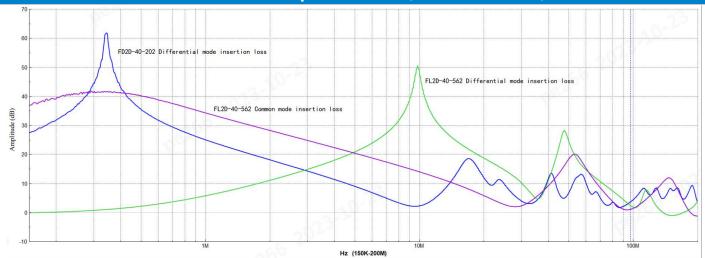




# FL2D-20-xxx Insertion Loss Specifications (reference value)



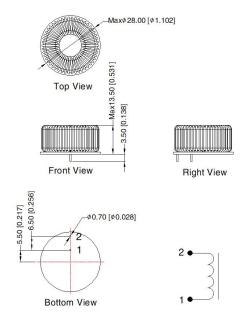
# FL2D/FD2D-40-xxx Insertion Loss Specifications (reference value )

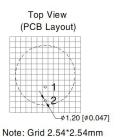




# FD2D-20-301 Schematic Diagram Of Pin Mark

## THIRD ANGLE PROJECTION





Note: Unit: mm[inch]

Pin diameter tolerances:  $\pm 0.10[\pm 0.004]$ General tolerances:  $\pm 0.50[\pm 0.020]$ 

Fig. 1

# FD2D-20-202 Schematic Diagram Of Pin Mark

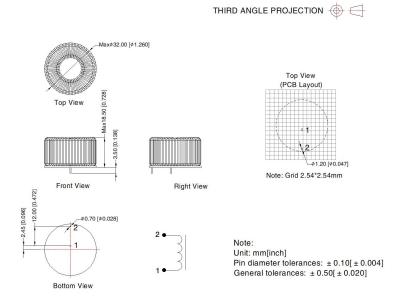
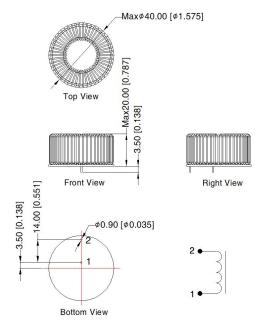


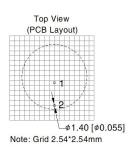
Fig. 2



### FD2D-40-202 Schematic Diagram Of Pin Mark







Note: Unit: mm[inch]

Pin diameter tolerances:  $\pm 0.10[\pm 0.004]$ General tolerances:  $\pm 0.50[\pm 0.020]$ 

Fig. 3

# FL2D-20-562 Schematic Diagram Of Pin Mark

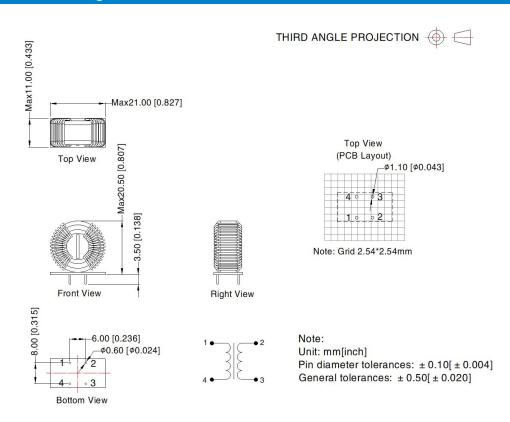


Fig. 4

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# FL2D-20-103 Schematic Diagram Of Pin Mark

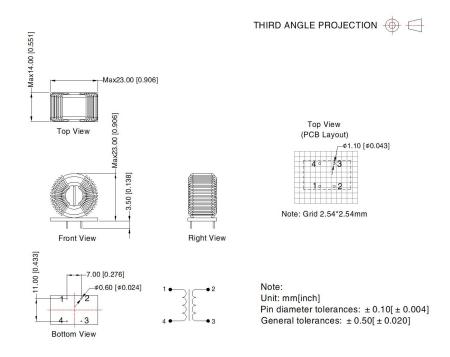


Fig. 5

## FL2D-40-562 Schematic Diagram Of Pin Mark

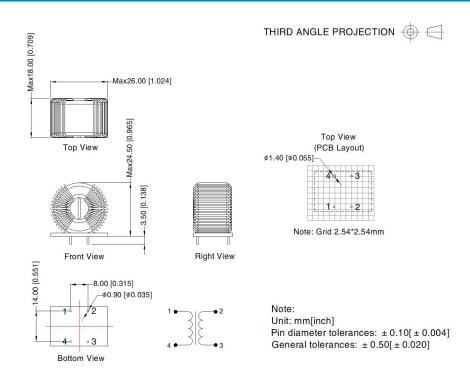


Fig. 6

#### **EMC Filter**

#### FD2D-20-xxx & FL2D-20-xxx & FD2D-40-xxx & FL2D-40-xxx



#### Note:

- For additional information on Product Packaging please refer to <a href="https://www.mornsun-power.com">www.mornsun-power.com</a>. Packaging bag number: 58210365 (FD2D-20-301); 58240100 (FD2D-20-202); 58220605 (FL2D-20-562、FL2D-20-103); 58240094 (FD2D-40-202); 58210379 (FL2D-40-562);
- 2. Unless otherwise specified, data in this data sheet should be tested under the conditions of Ta=25℃, humidity<75%RH;
- 3. All index testing methods in this datasheet are based on company corporate standards;
- 4. The performance indexes of the product models listed in this manual are as above, but some indexes of non-standard model products will exceed the above-mentioned requirements, and please directly contact our technicians for specific information;
- 5. We can provide product customization service, please contact our technicians directly for specific information;
- 6. Products are related to laws and regulations: see "Features";
- Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.

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