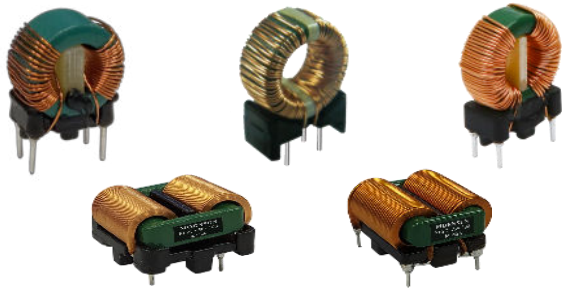


### Common Mode Filter



RoHS

### FEATURES

- Good temperature characteristic
- Compact size
- Effective anti-interference
- High reliability
- Meets UL508 isolation requirements

It is suitable for occasions that are sensitive to noise and EMC, such as analog circuits. Adding FL2D-xx-xxx to the front end of the module, the noise at the output of the module can be greatly reduced, which can significantly improve the EMC performance.

### Selection Guide

Model	Inductance (μH)(typ)	Current (A)(max)	DCR(mΩ) (typ)	Weight (g) (typ)	Size(L*W*H)
FL2D-Z5-103	10000*2	0.5	500*2	4.5	17*9.6*18 See Figure 1
FL2D-Z5-153	15000*2	0.5	600*2	4.5	17*9.6*18 See Figure 1
FL2D-Z5-223	22000*2	0.5	650*2	4.5	17*9.6*18 See Figure 1
FL2D-10-102	1000*2	1.0	70*2	4.5	17*9.6*18 See Figure 1
FL2D-10-222	2200*2	1.0	90*2	4.5	17*9.6*18 See Figure 1
FL2D-10-332	3300*2	1.0	100*2	4.5	17*9.6*18 See Figure 1
FL2D-10-472	4700*2	1.0	140*2	4.5	17*9.6*18 See Figure 1
FL2D-10-502	3500*2	1.0	220*2	3.4	15*7.8*18 See Figure 9
FL2D-10-682	6800*2	1.0	160*2	6.5	19*11*23.5 See Figure 2
FL2D-10-822	8200*2	1.0	180*2	6.5	19*11*23.5 See Figure 2
FL2D-10-203	20000*2	1.0	240*2	5.6	18*10*17.5 See Figure 8
FL2D-30-351	350*2	3.0	30*2	3.9	17*9.6*18 See Figure 1
FL2D-30-102	1000*2	3.0	40*2	4.5	17*9.6*18 See Figure 1
FL2D-30-222	2200*2	3.0	50*2	4.5	17*9.6*18 See Figure 1
FL2D-30-472	4700*2	3.0	70*2	4.5	17*9.6*18 See Figure 1
FL2D-30-103	10000*2	3.0	50*2	13.8	24.5*22.5*15.5 See Figure 3
FL2D-60-402	4000*2	6.0	35*2	20.0	24*23.5*19 See Figure 5
FL2D-60-451	450*2	6.0	9*2	6.4	18*15*17 See Figure 6
FL2D-A2-202	2000*2	12.0	145*2	25.2	26.5*25*16.5 See Figure 4
FL2D-D0-040	4*2	40.0	2*2	30.9	36*28*20 See Figure 7

Note: The Inductance of FL2D-30-103, FL2D-A2-202 are minimum value, others are typical value.

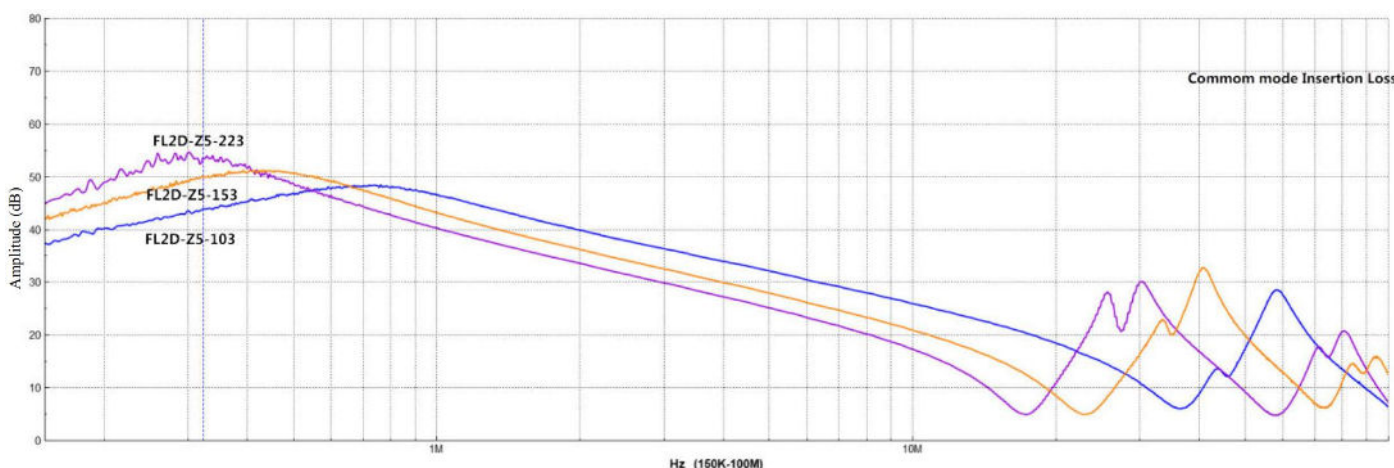
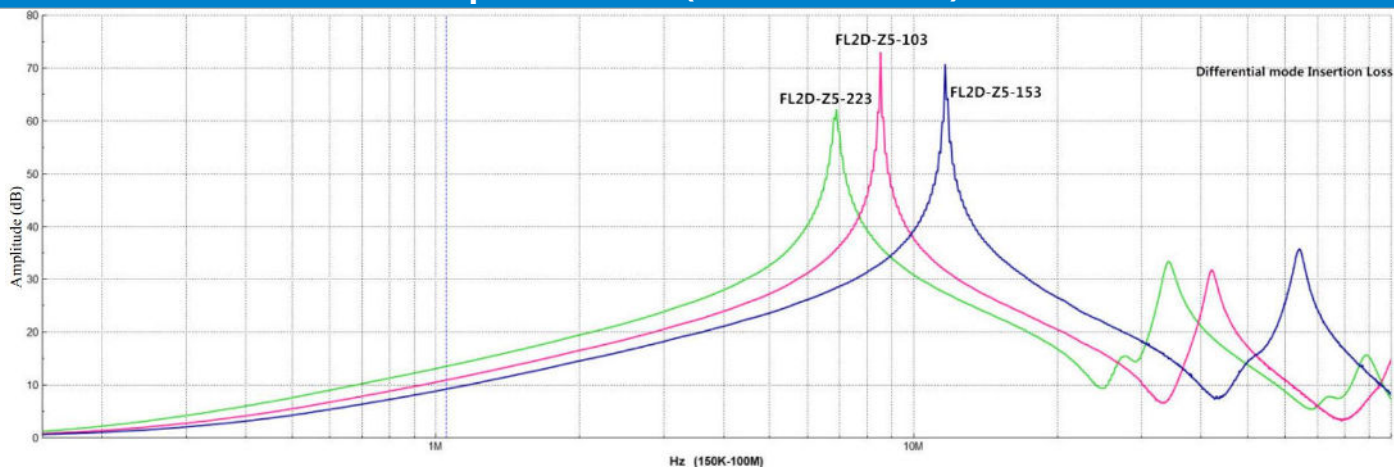
### General Specifications

Item	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature*	FL2D-10-502	-40	--	+125	°C
	Others	-40	--	+105	
Storage Temperature	FL2D-10-502	-40	--	+125	
	Others	-40	--	+105	
Storage Humidity		--	--	95	%RH
Inductance	fo=1kHz, Uo=0.3V	FL2D-30-351	-50	--	%

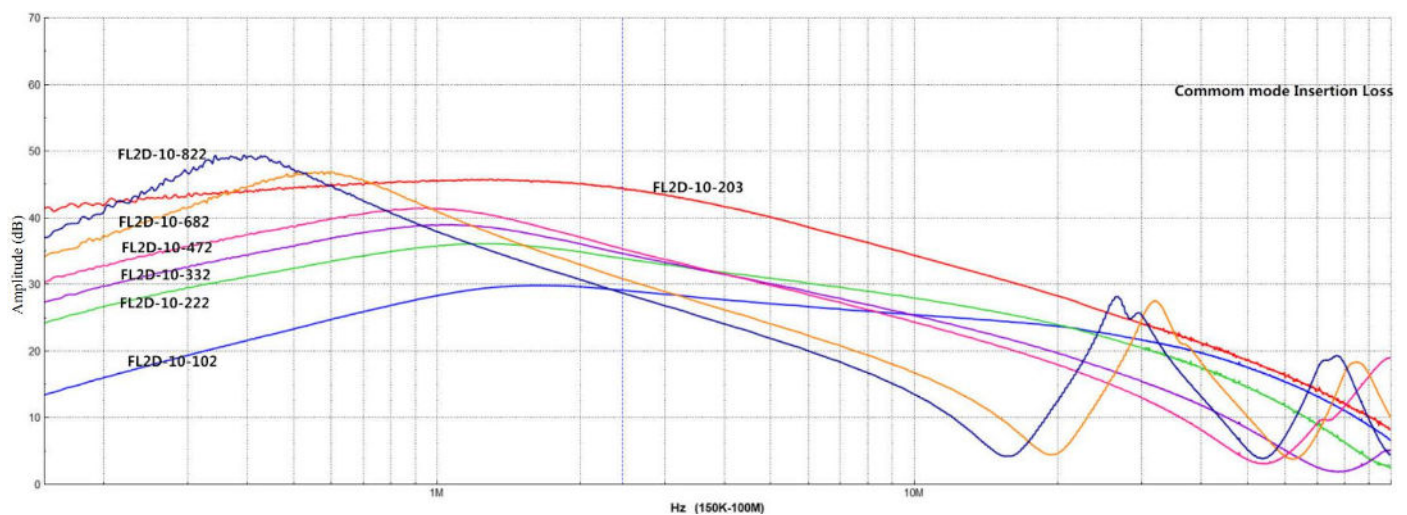
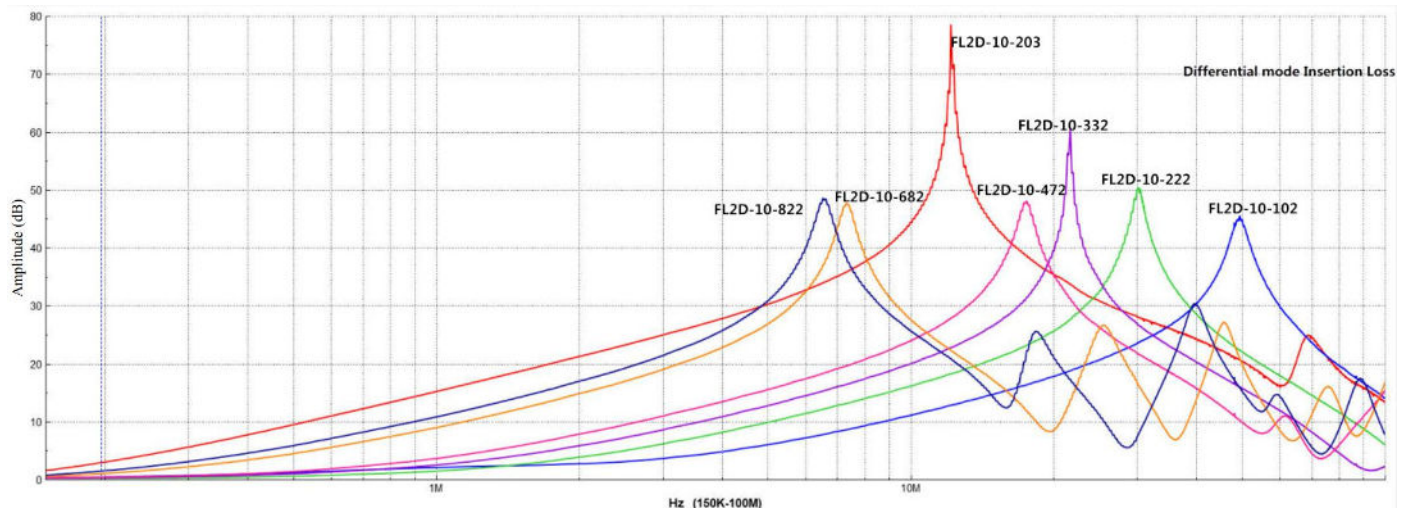
		Others	-35	--	--	
Isolation	Leakage current $I_o=1mA$ , Electric Strength Test for 1min.		2000	--	--	VDC
	Leakage current $I_o=5mA$ , Electric Strength Test for 1min.(only for FL2D-30-103, FL2D-A2-202, FL2D-10-502)	Coil-coil	1500	--	--	VAC
		Coil-core	1000	--	--	
Vibration	FL2D-30-103, FL2D-A2-202, FL2D-60-402, FL2D-60-451, FL2D-D0-040		IEC60077, IEC 61373 - Category 1, Grade B			

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

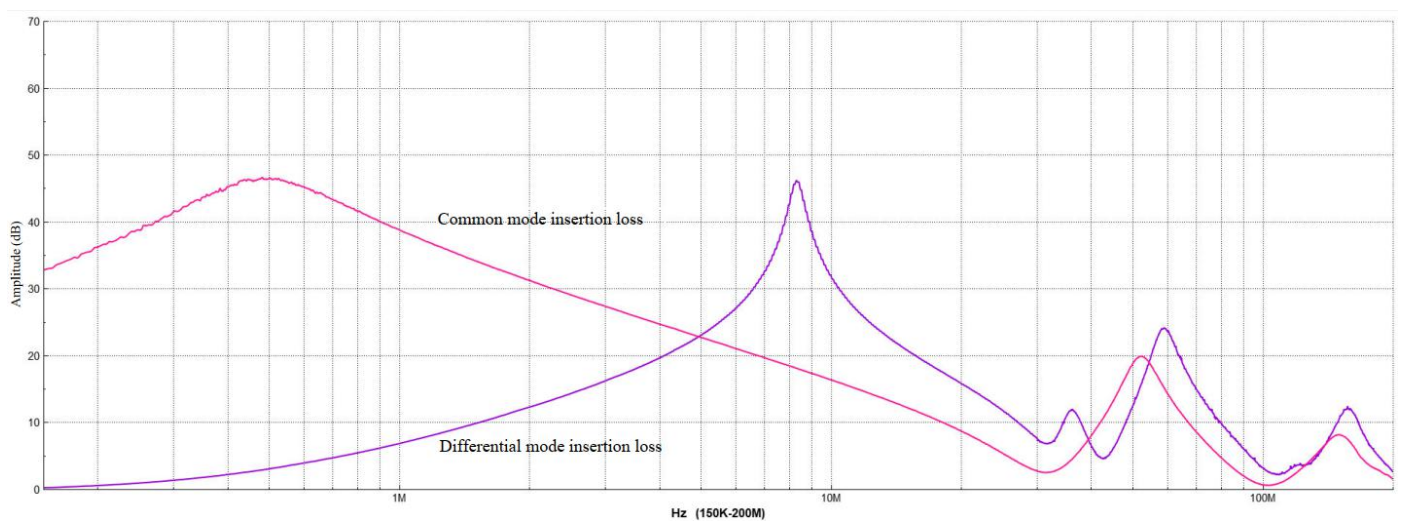
### FL2D-Z5-xxx Insertion Loss Specifications (reference value )



**FL2D-10-xxx Insertion Loss Specifications (reference value )**

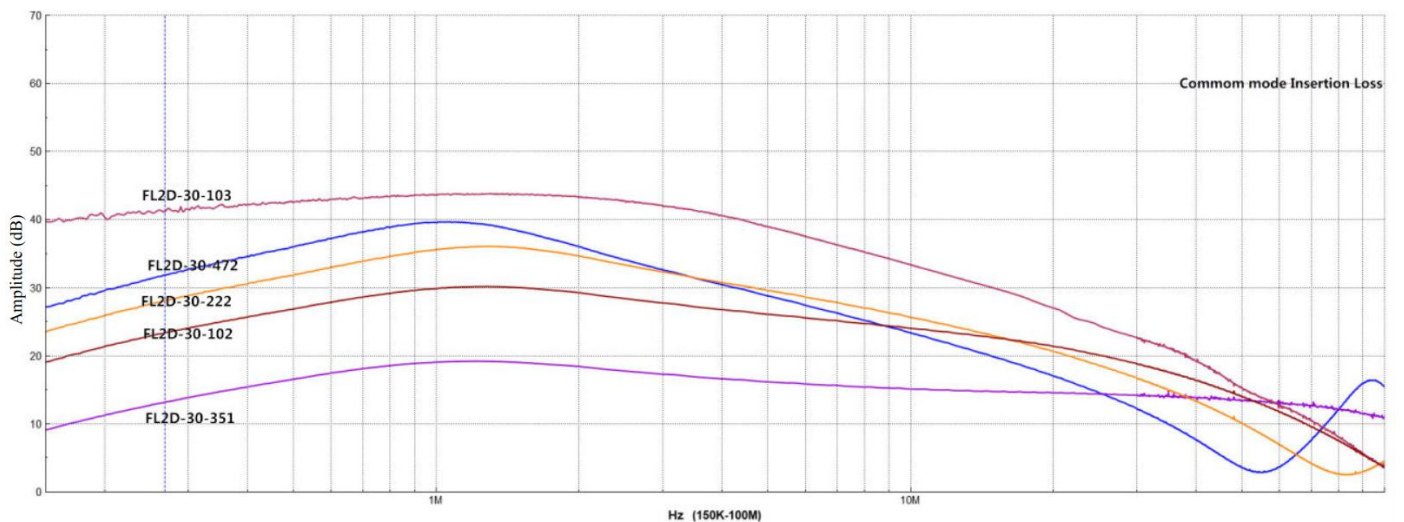
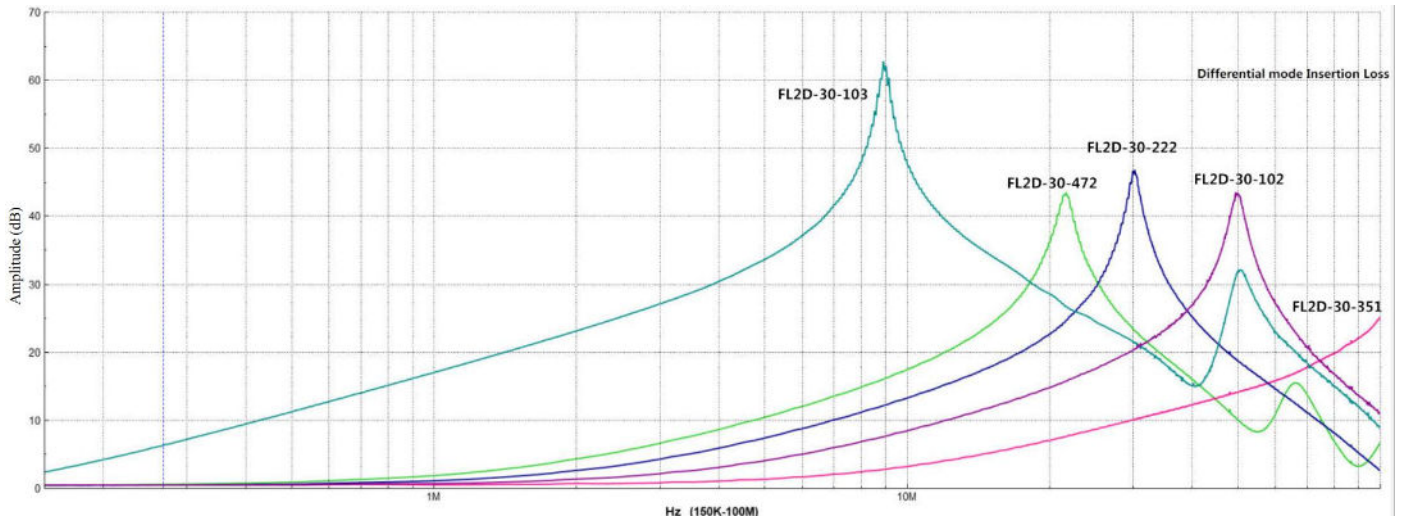


**FL2D-10-502 Insertion Loss Specifications (reference value )**

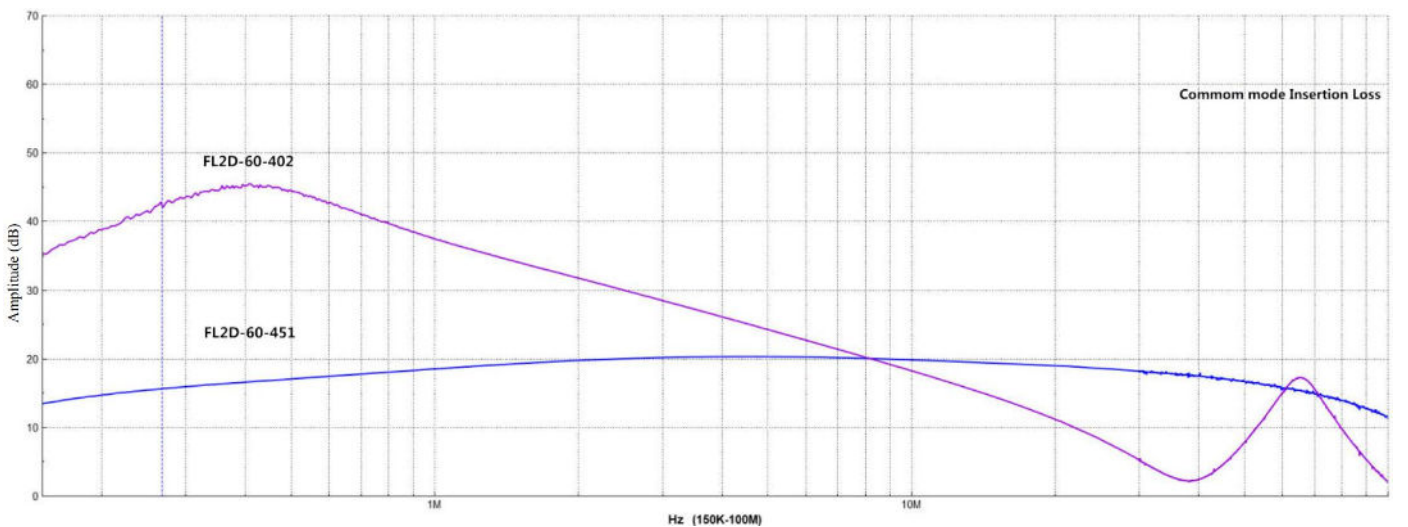
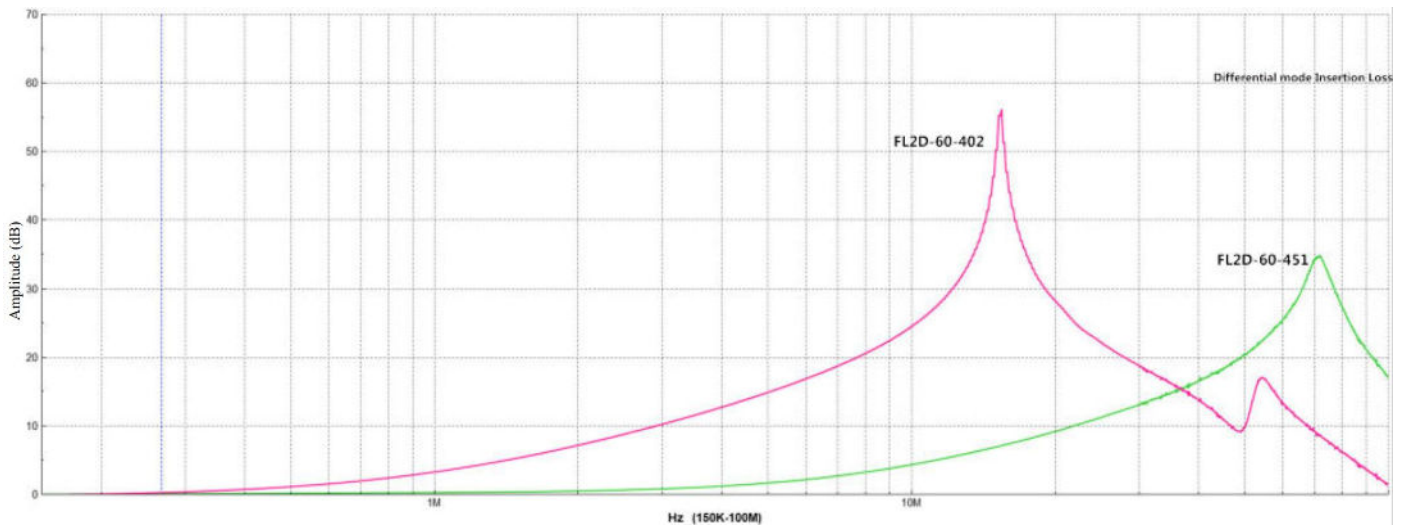




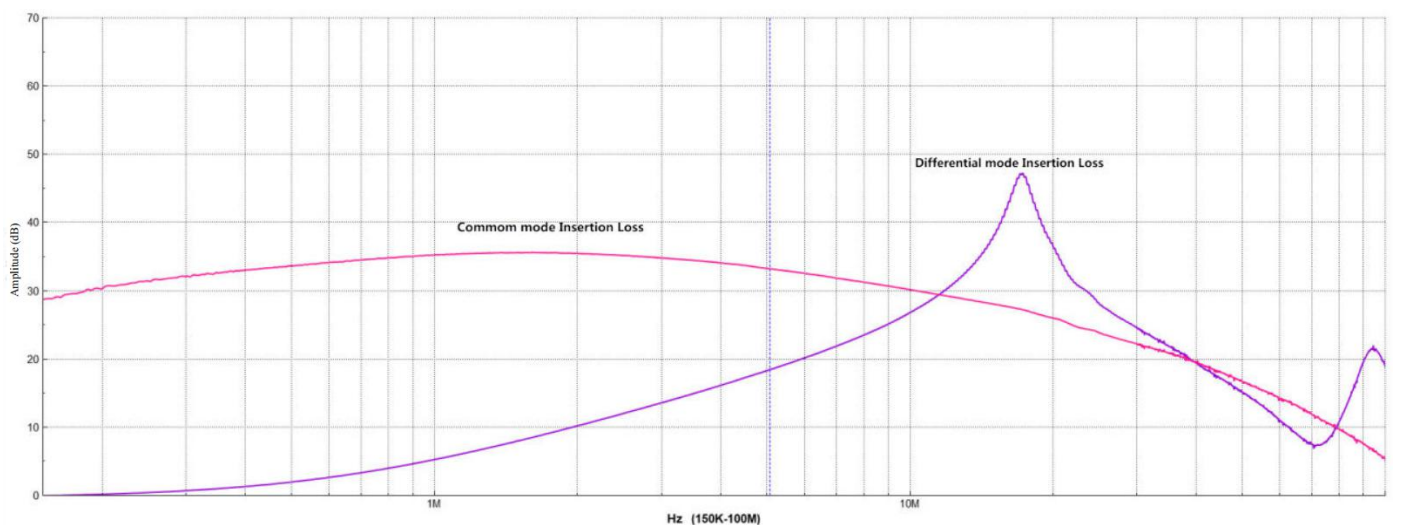
### FL2D-30-xxx Insertion Loss Specifications (reference value )



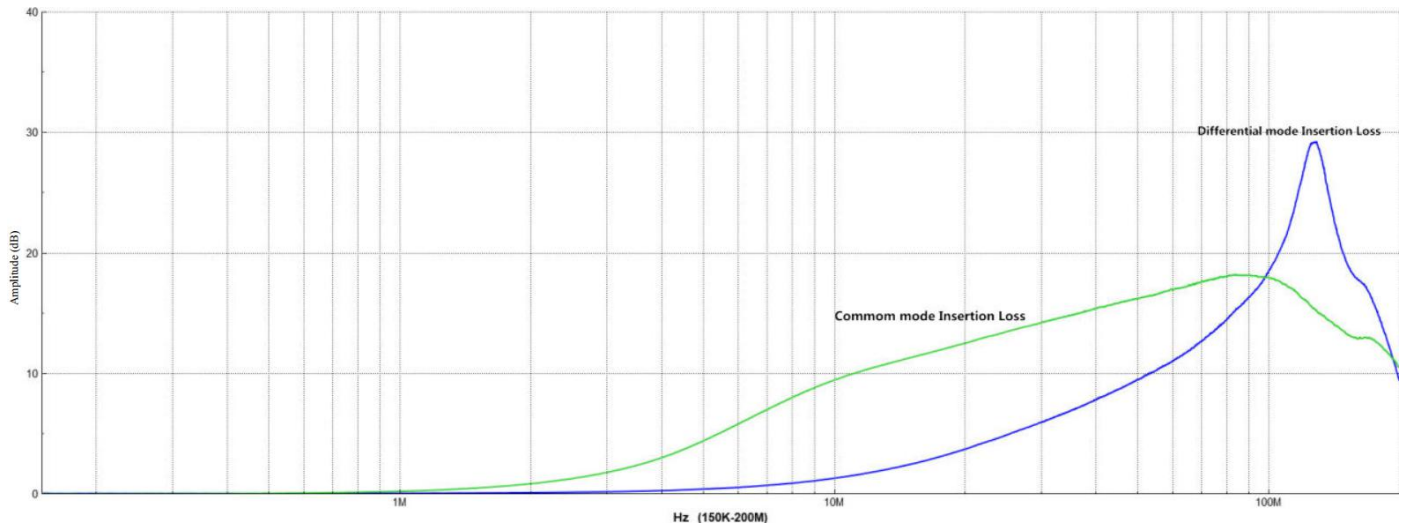
### FL2D-60-xxx Insertion Loss Specifications (reference value )



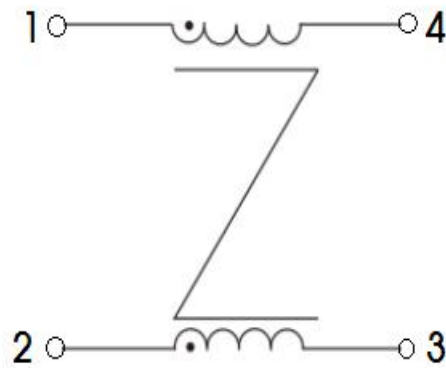
### FL2D-A2-xxx Insertion Loss Specifications (reference value )



### FL2D-D0-xxx Insertion Loss Specifications (reference value )



### Pin Function



**Dimensions and Recommended Layout**

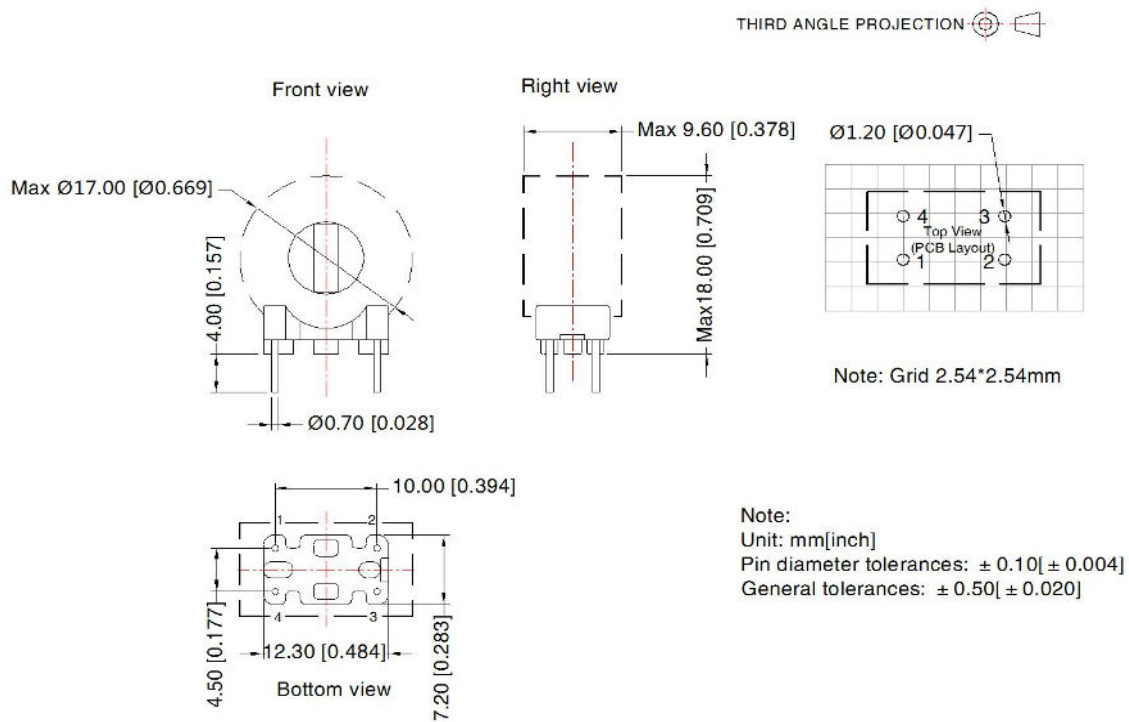


Fig. 1

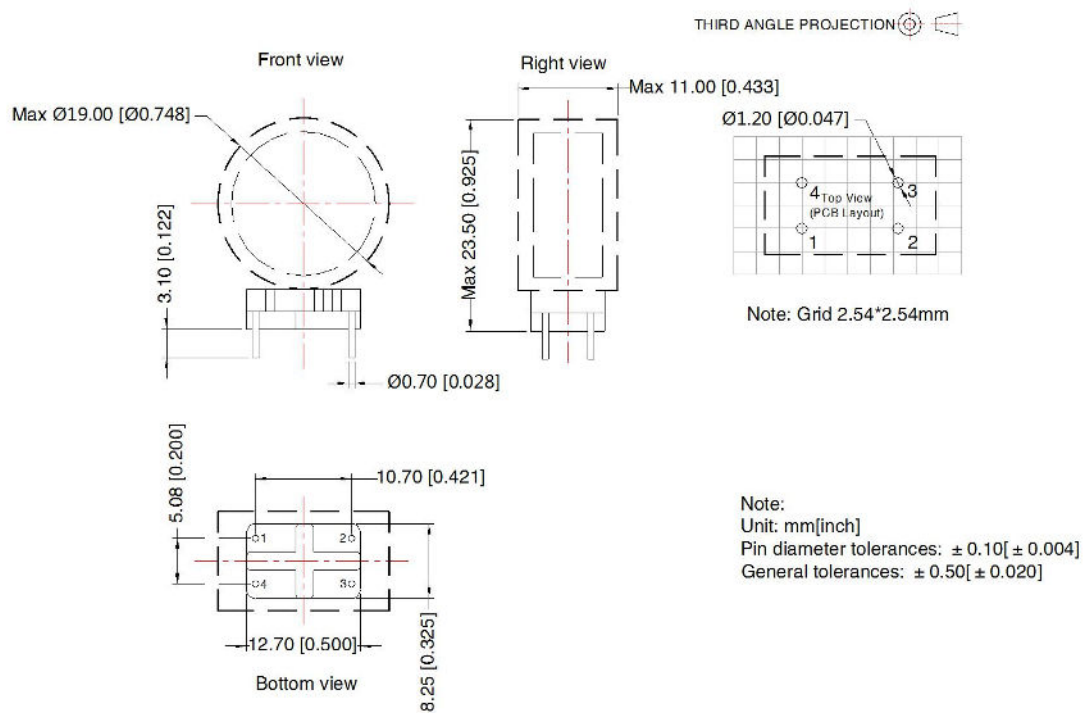


Fig. 2



THIRD ANGLE PROJECTION 

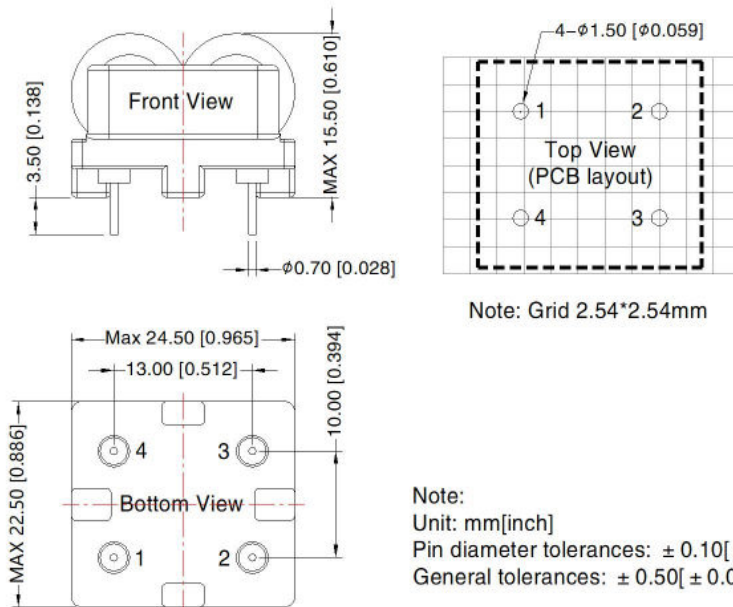


Fig. 3

THIRD ANGLE PROJECTION 

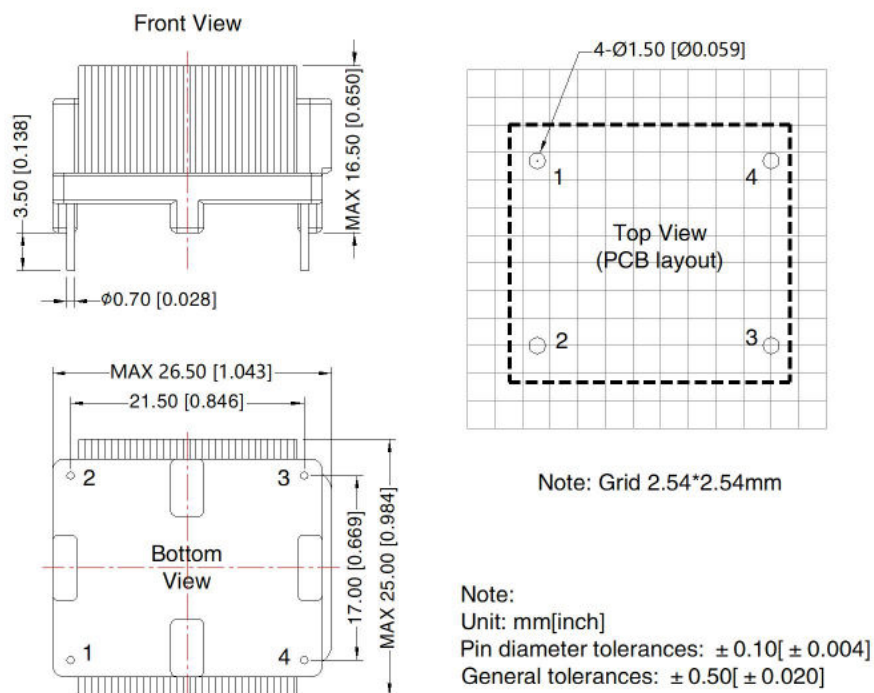


Fig. 4



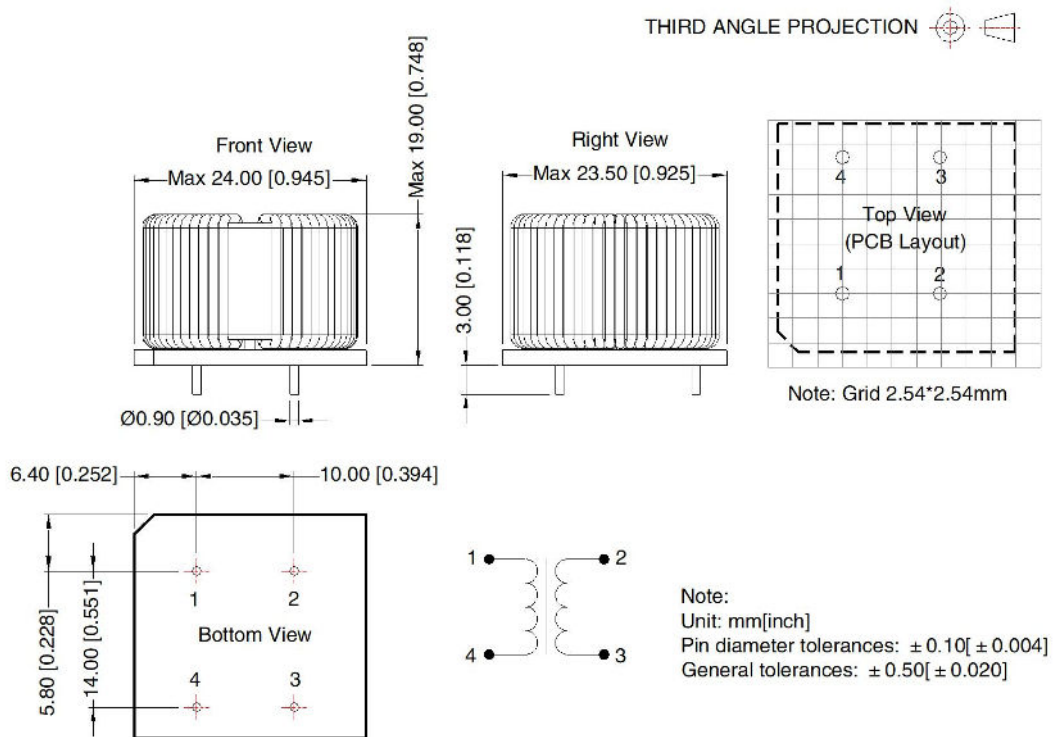


Fig. 5

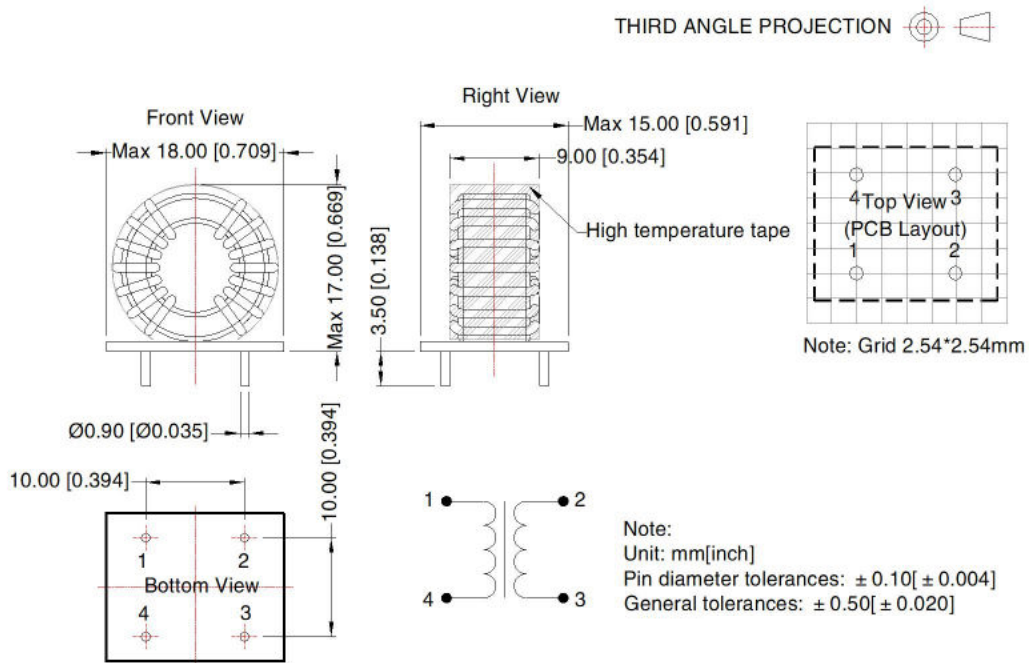


Fig. 6

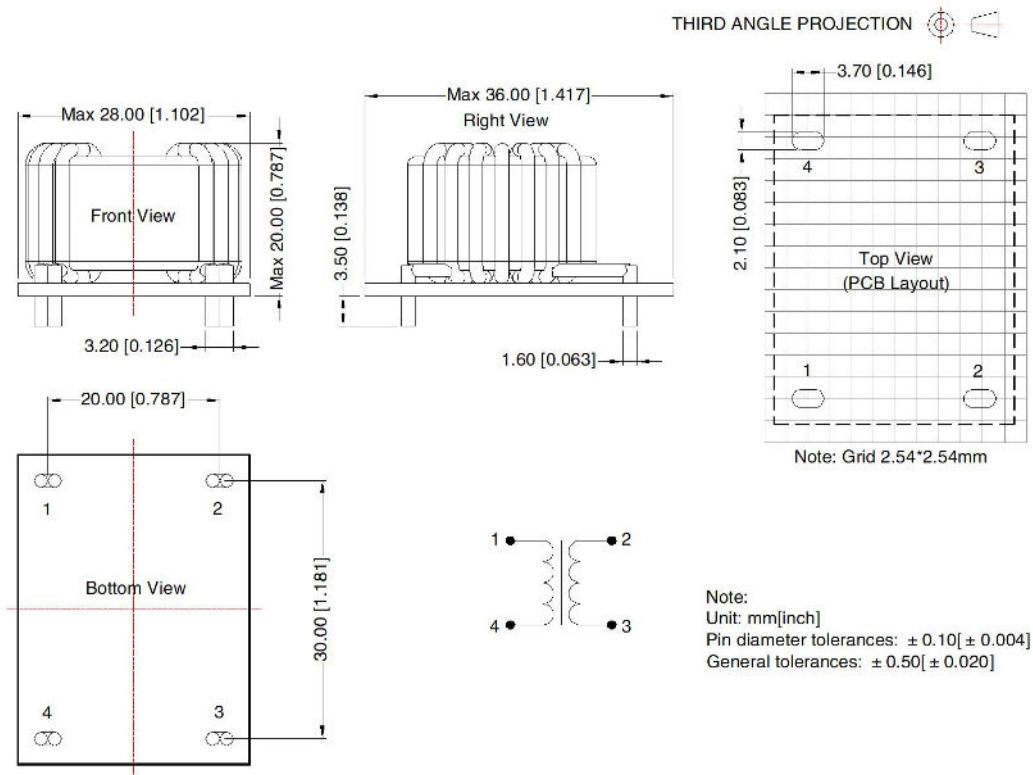


Fig. 7

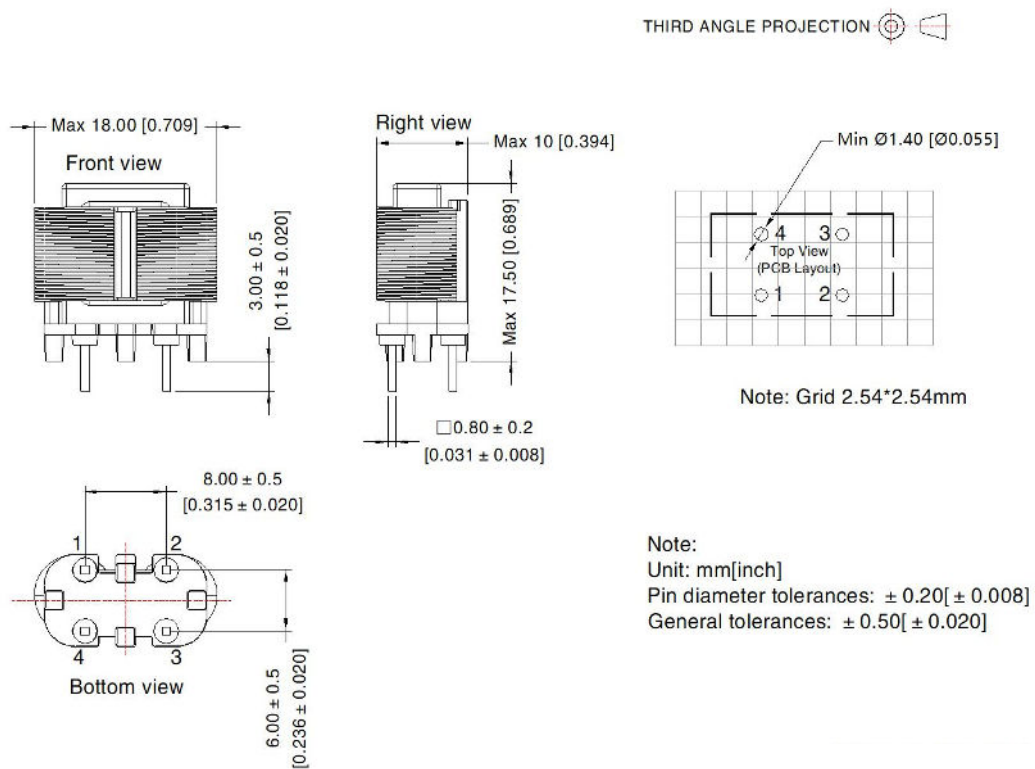


Fig. 8

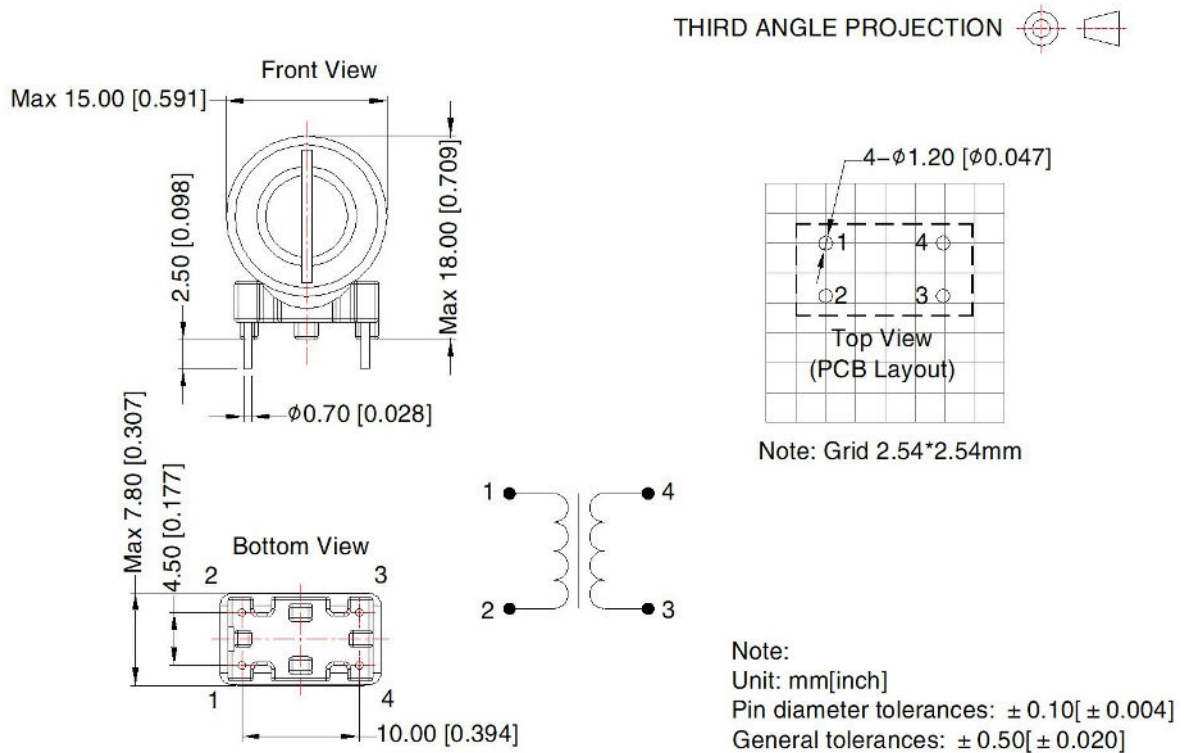


图 9

Note:

- For additional information on Product Packaging please refer to [www.mornsun-power.com](http://www.mornsun-power.com). Packaging bag number: 58200055 (FL2D-10-682/FL2D-10-822/FL2D-30-103/FL2D-A2-202), 58210146(FL2D-60-402), 58210147(FL2D-60-451), 58220135(FL2D-D0-040), 58220123 (FL2D-10-203) 、 58220018(Others);
- Unless otherwise specified, data in this data sheet should be tested under the conditions of Ta=25°C, humidity<75%RH;
- All index testing methods in this datasheet are based on company corporate standards;
- 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;
- We can provide product customization service, please contact our technicians directly for specific information;
- 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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