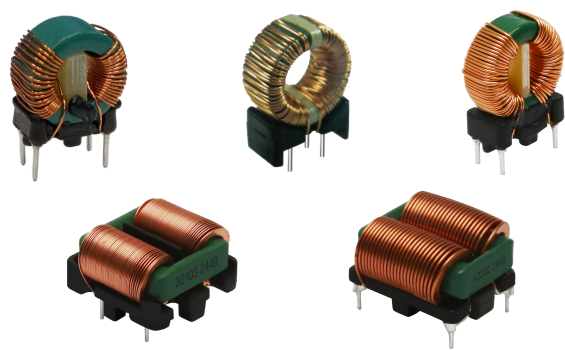


Common Mode Filter



FEATURES

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

RoHS

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

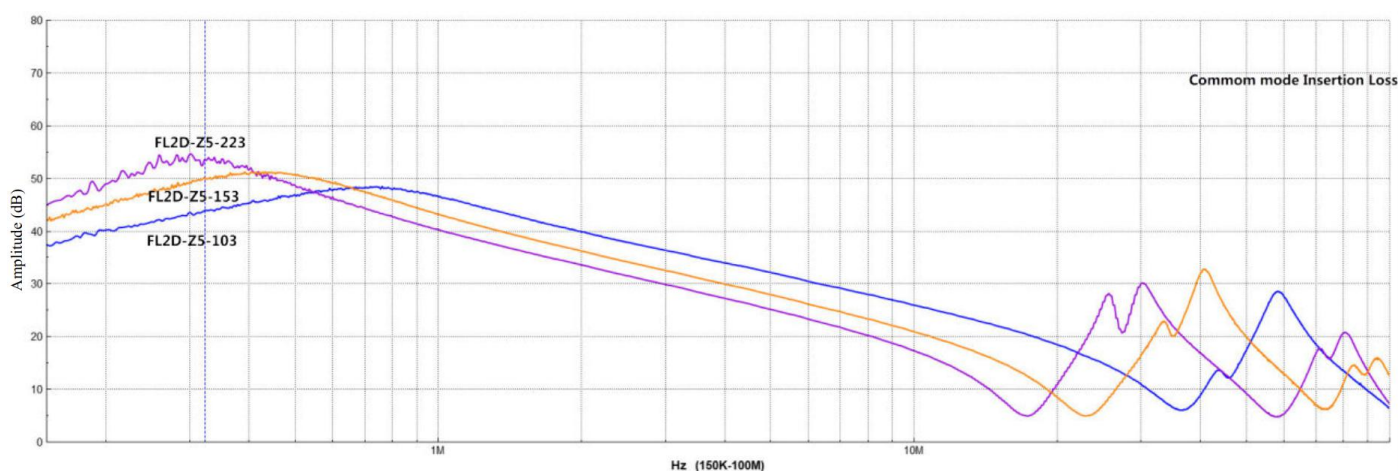
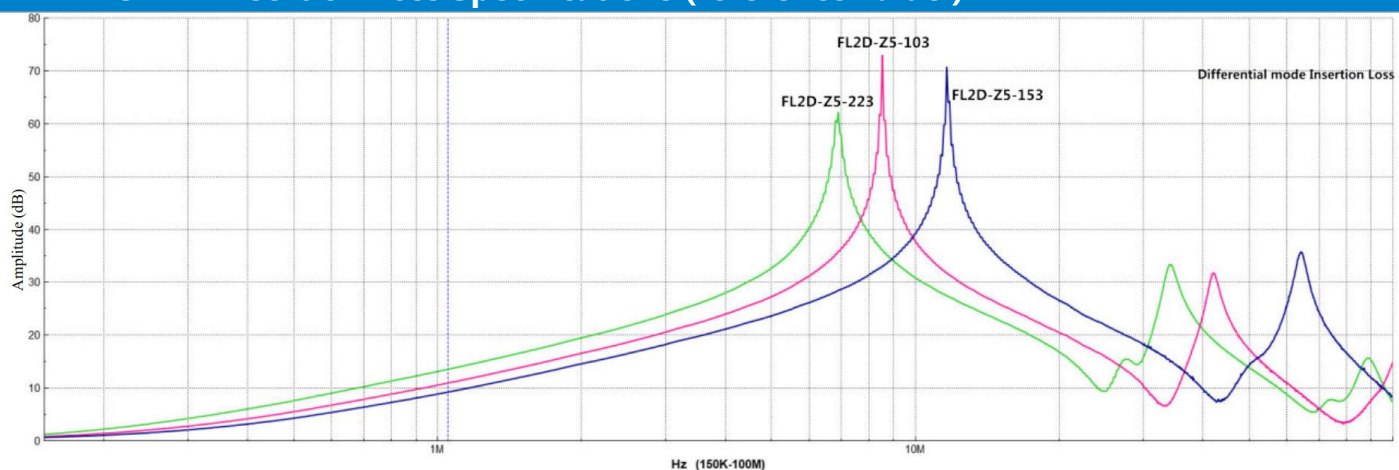
Note: The Inductance of FL2D-30-103, FL2D-A2-202 are minimum value, others are typical value.

General Specifications

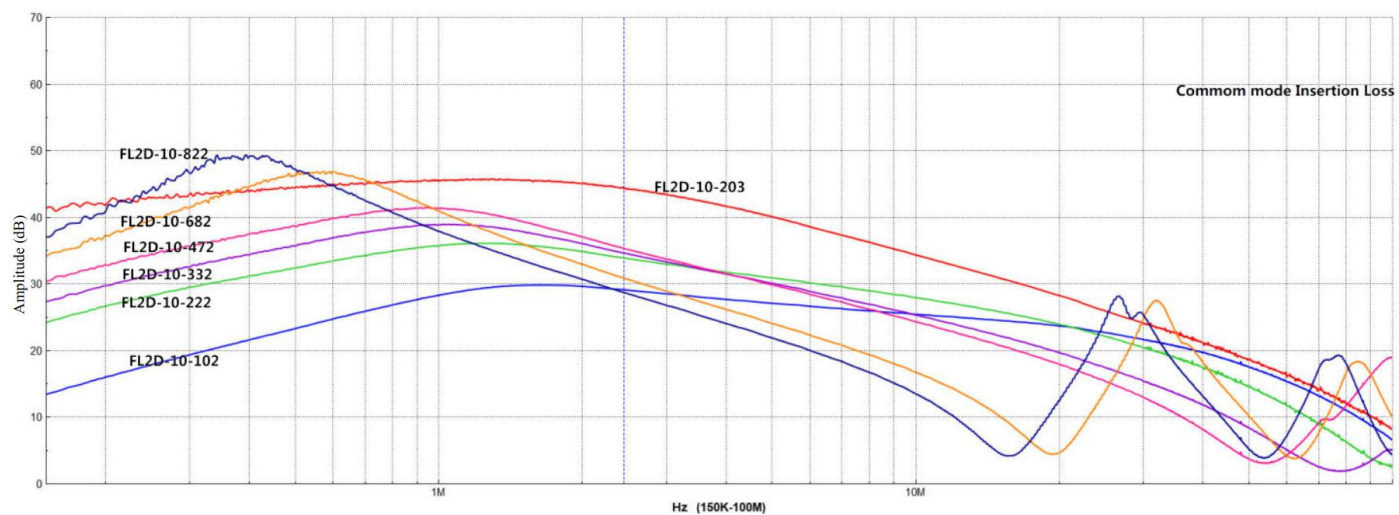
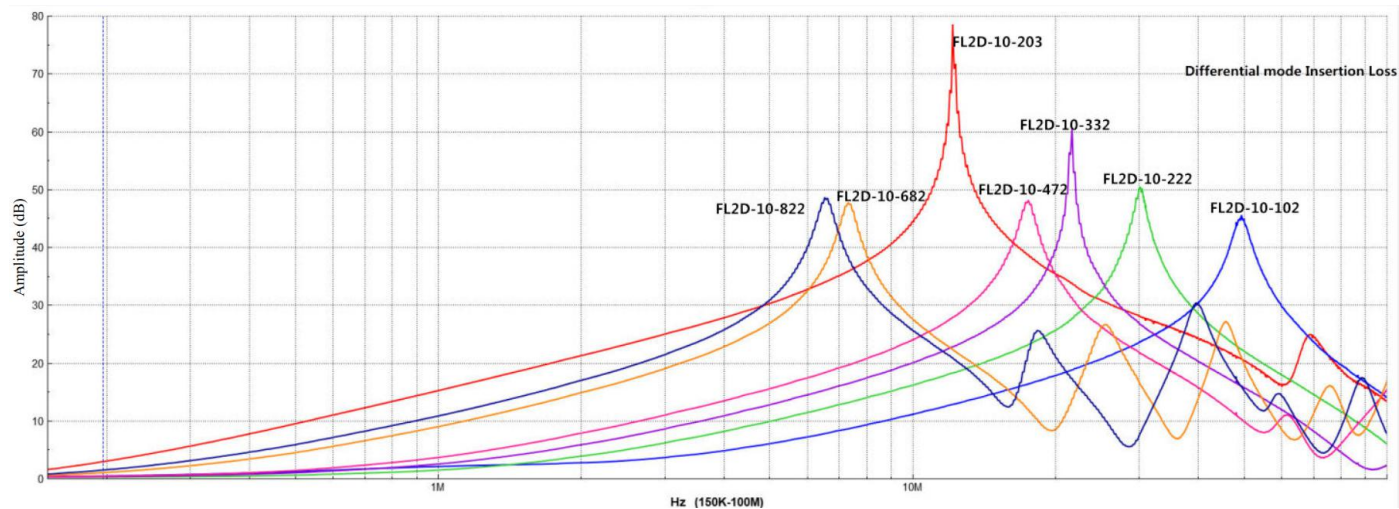
Item	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature*	FL2D-10-502	-40	--	+125	℃
	Others	-40	--	+105	
Storage Temperature	FL2D-10-502	-40	--	+125	
	Others	-40	--	+105	

Welding Temperature	Wave soldering welding,10 seconds MAX		+255	+260	+265	
Storage Humidity			--	--	95	%RH
Inductance Error Range	fo=1kHz, Uo=0.3V	FL2D-30-351	-50	--	--	%
		Others	-35	--	--	
Isolation	Leakage current Io=1mA,Electric Strength Test for 1min.		--	--	2000	VDC
	Leakage current Io=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.						

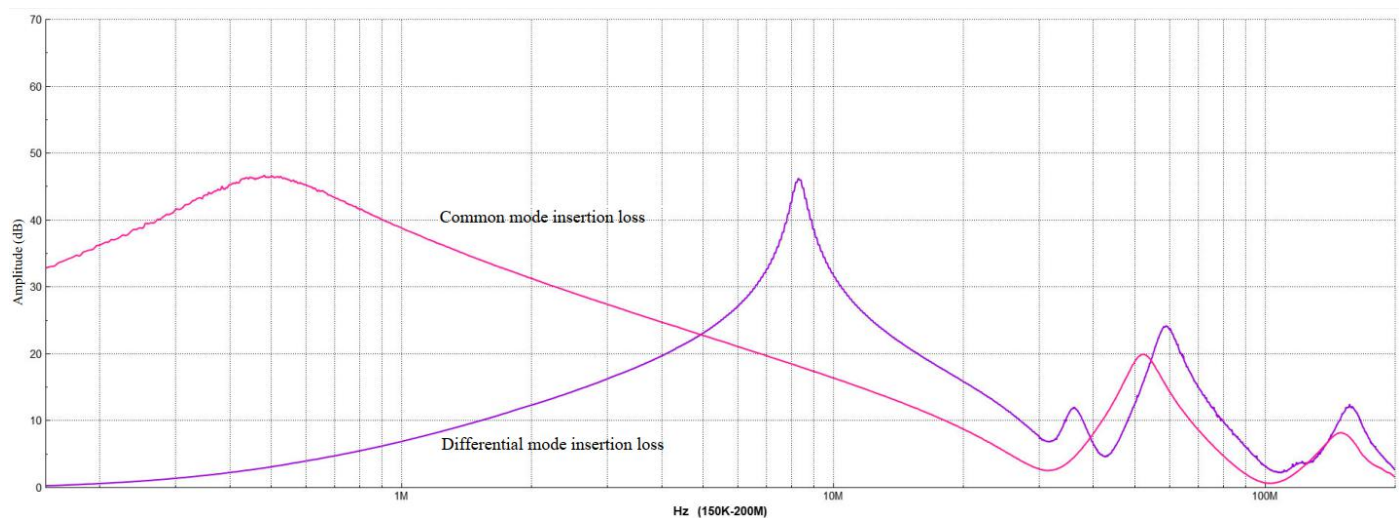
## FL2D-Z5-xxx Insertion Loss Specifications (reference value )



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

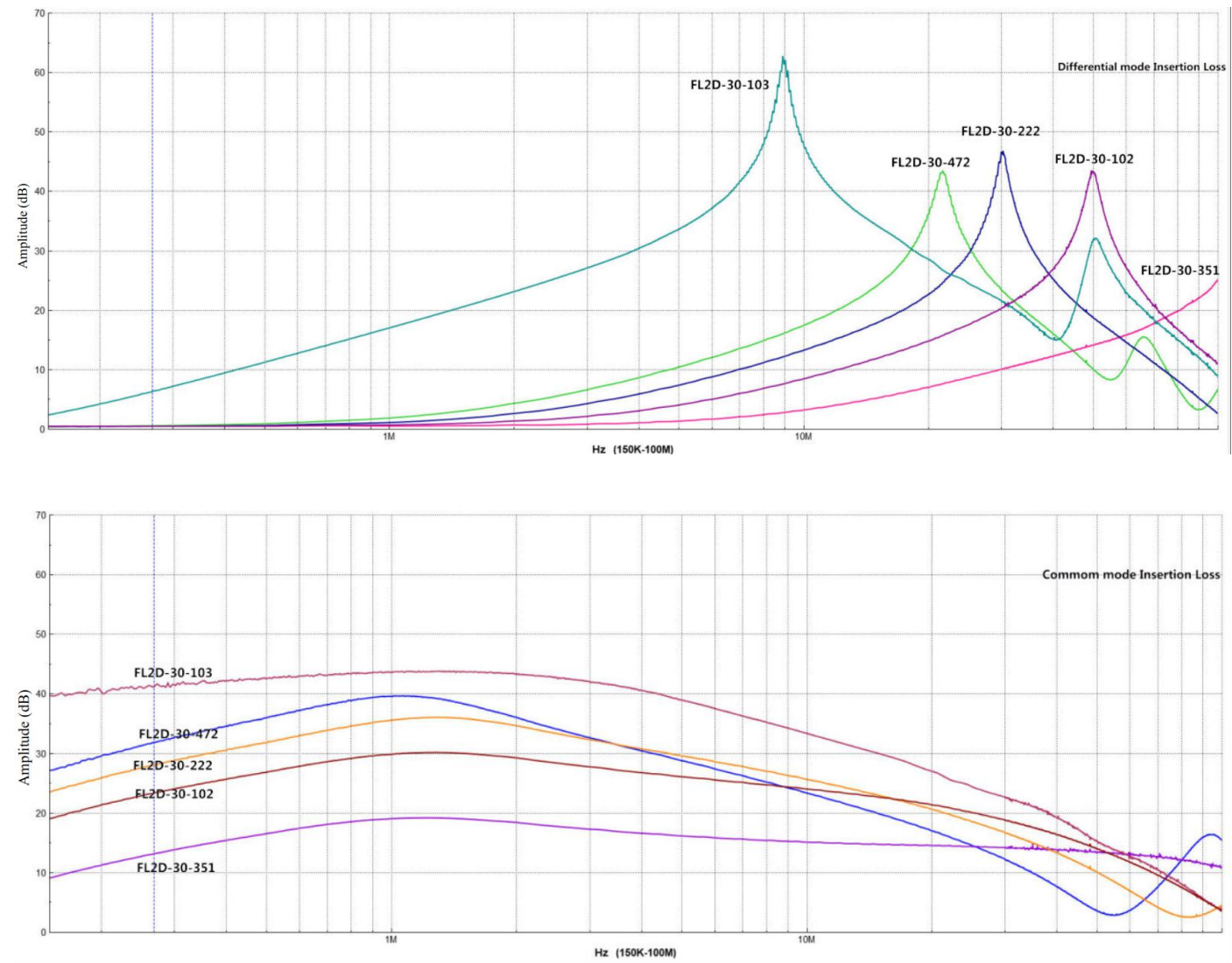


### FL2D-10-502 Insertion Loss Specifications (reference value )

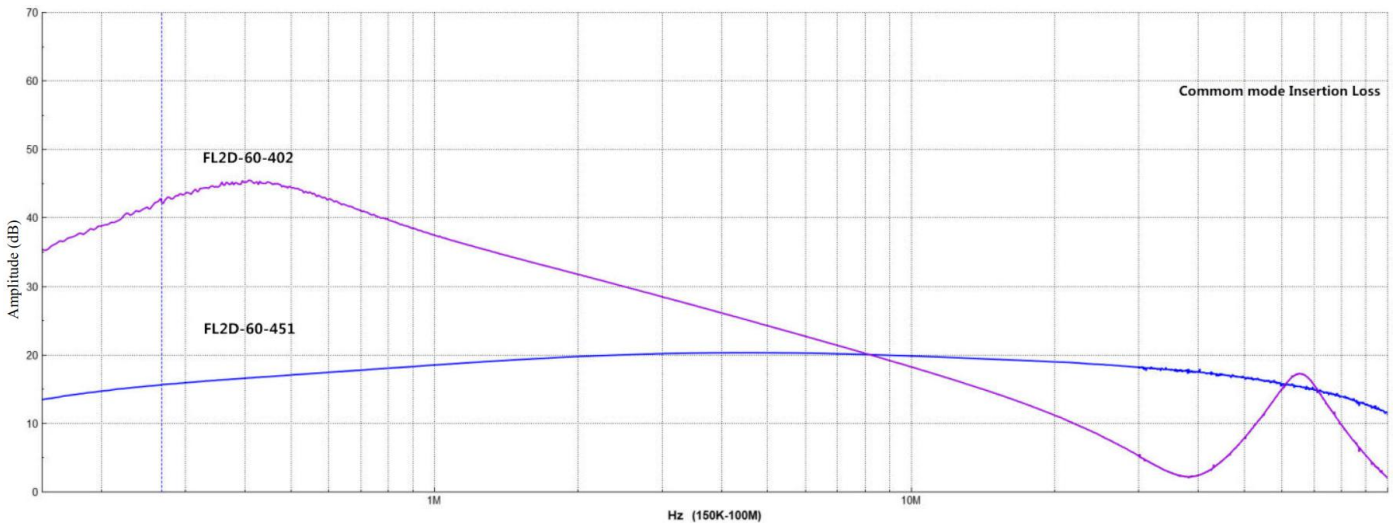
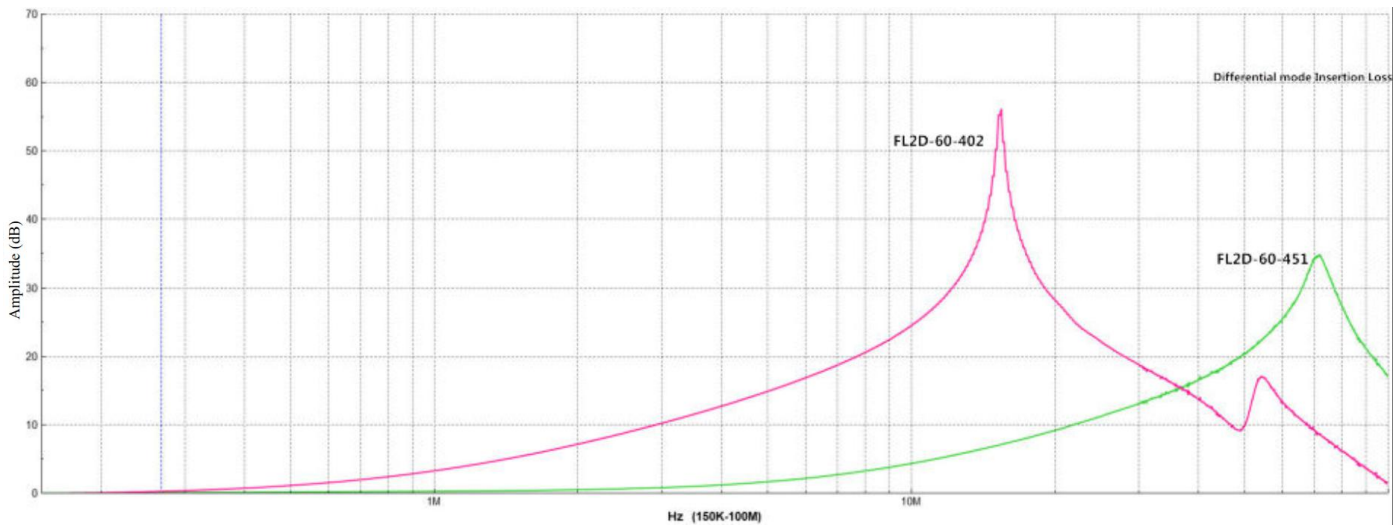




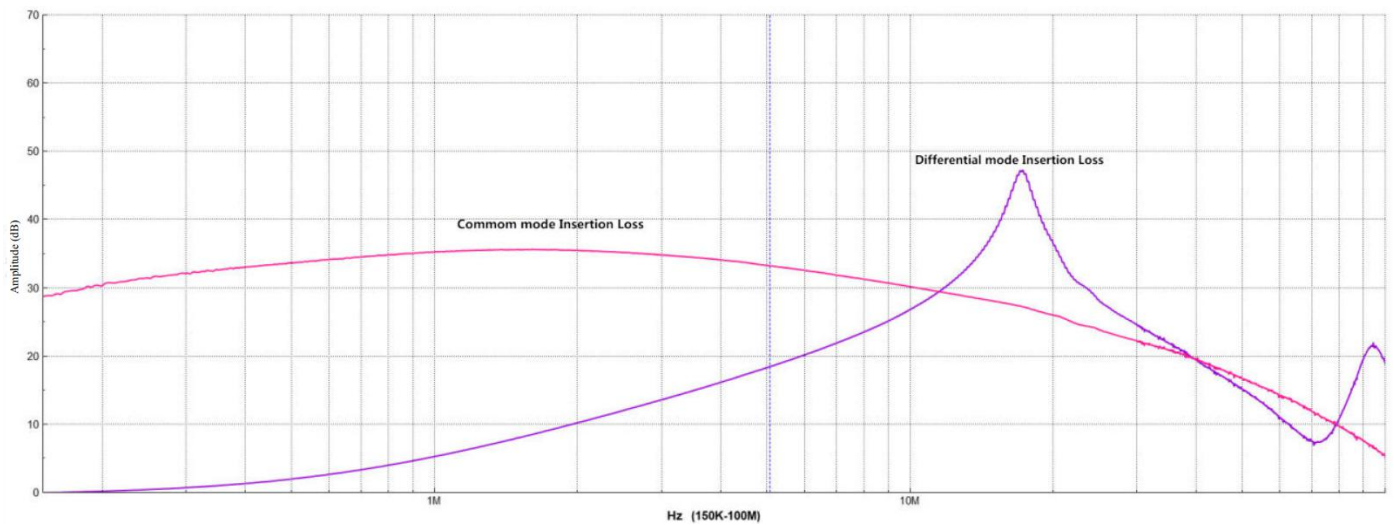
FL2D-30-xxx Insertion Loss Specifications (reference value )



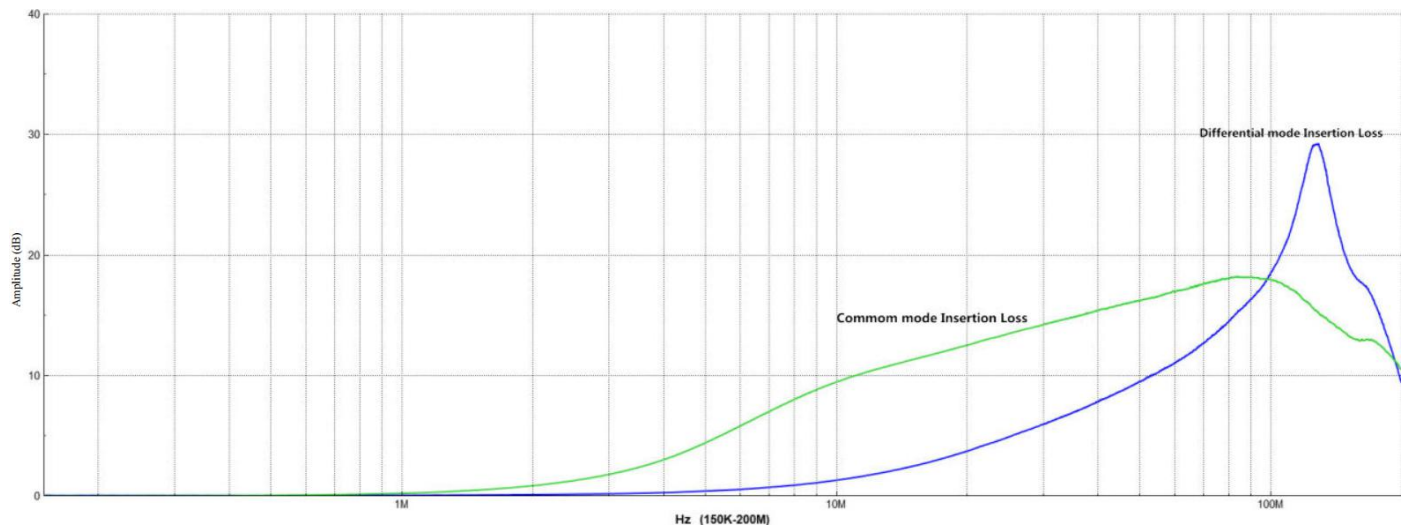
FL2D-60-xxx Insertion Loss Specifications (reference value )



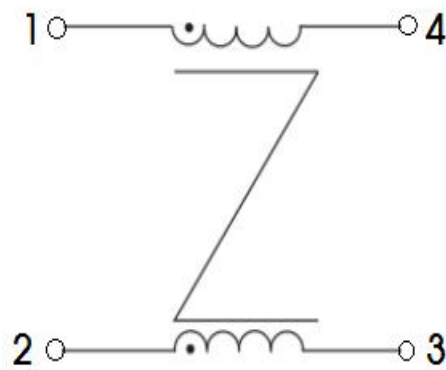
FL2D-A2-xxx Insertion Loss Specifications (reference value )



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



Pin Function



Dimensions and Recommended Layout

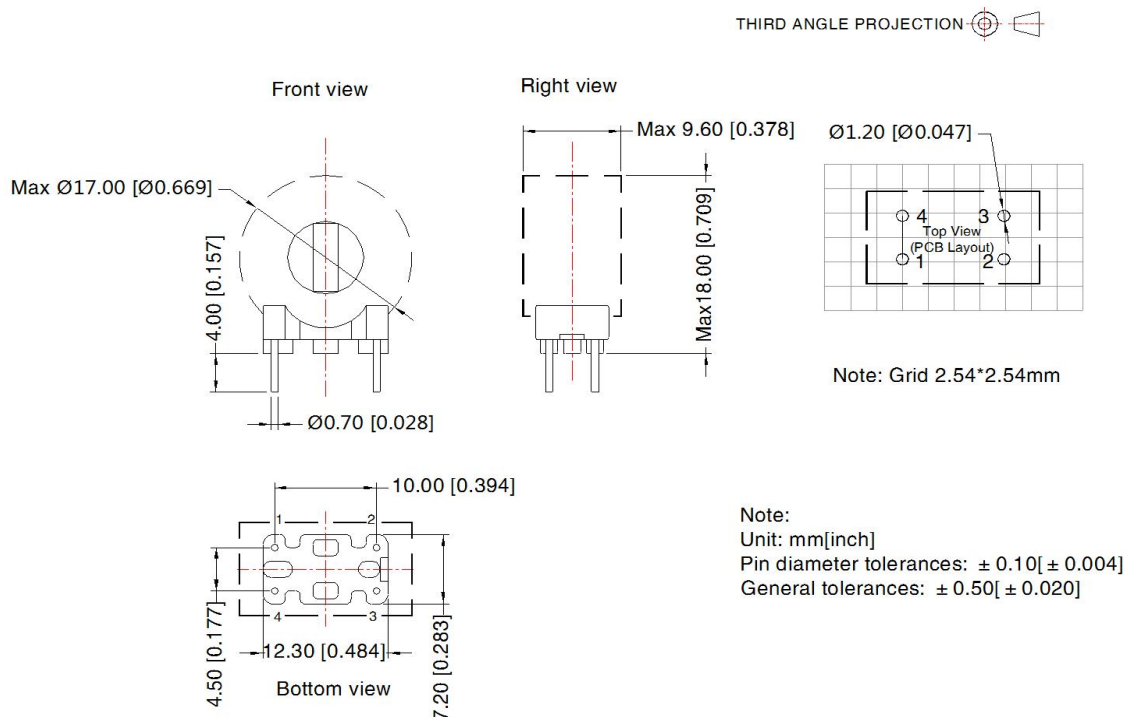


Fig. 1

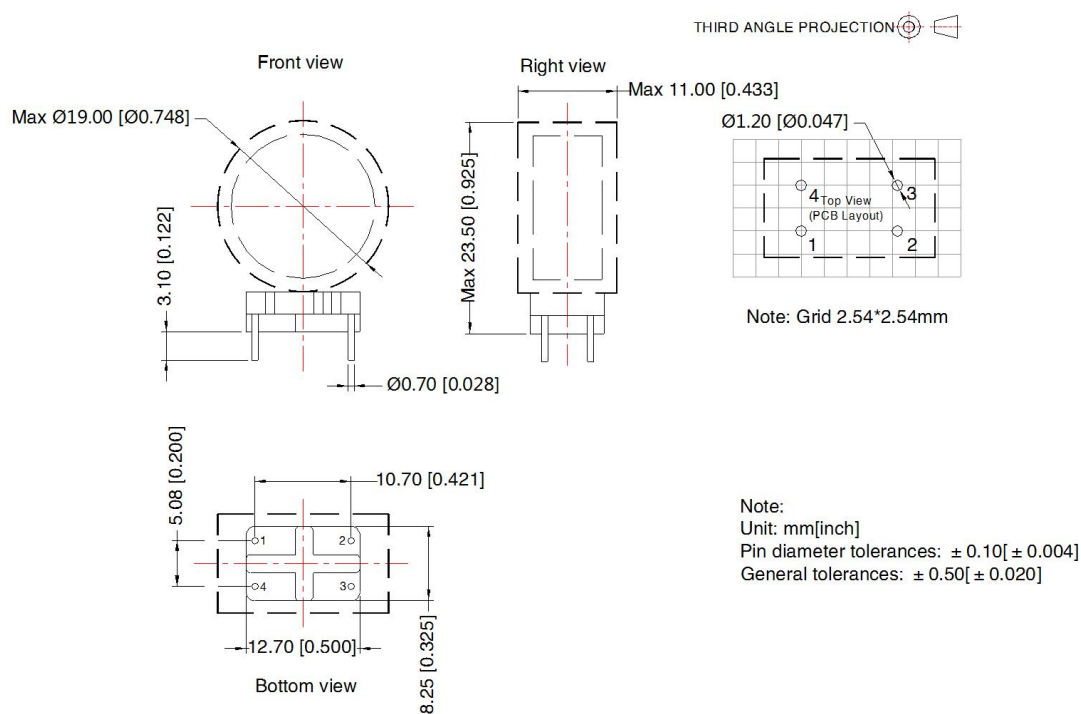



Fig. 2



THIRD ANGLE PROJECTION 

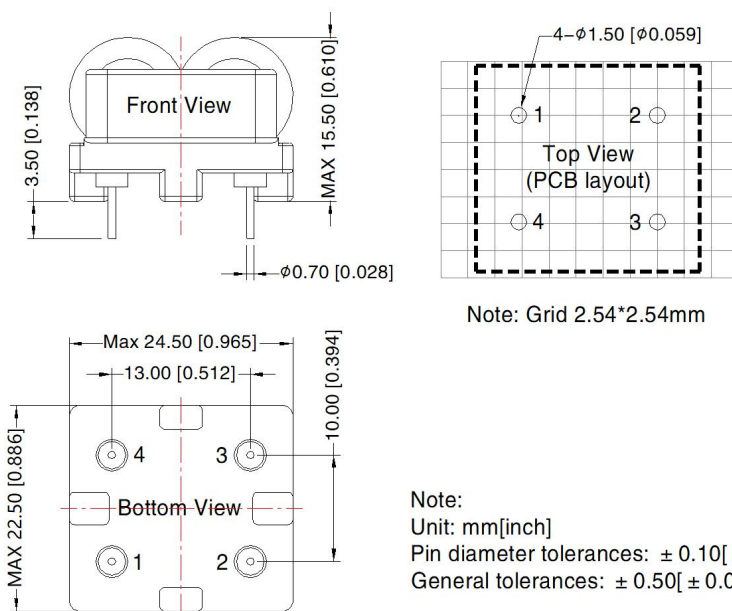
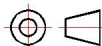


Fig. 3

THIRD ANGLE PROJECTION 

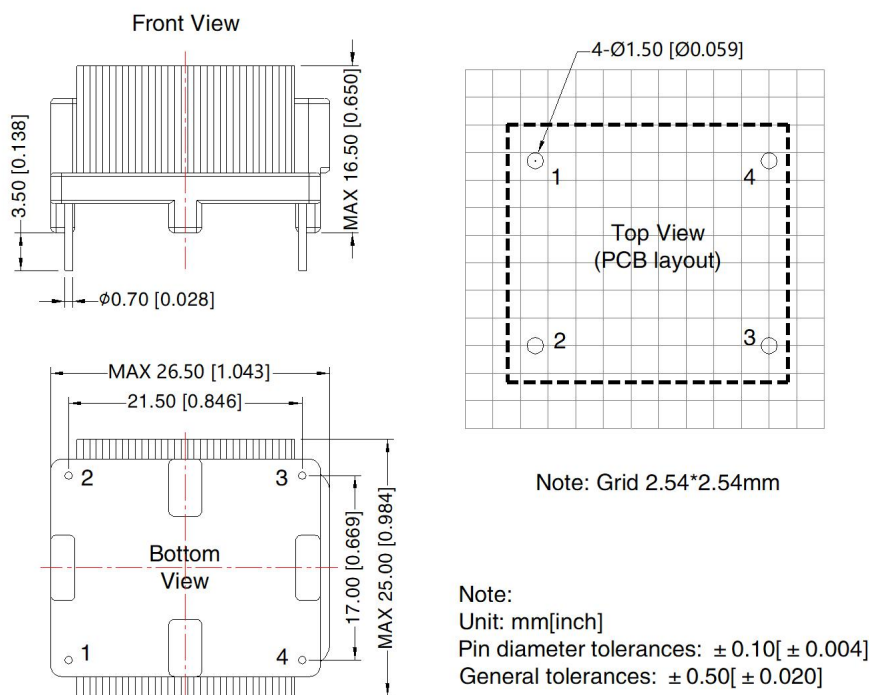


Fig. 4



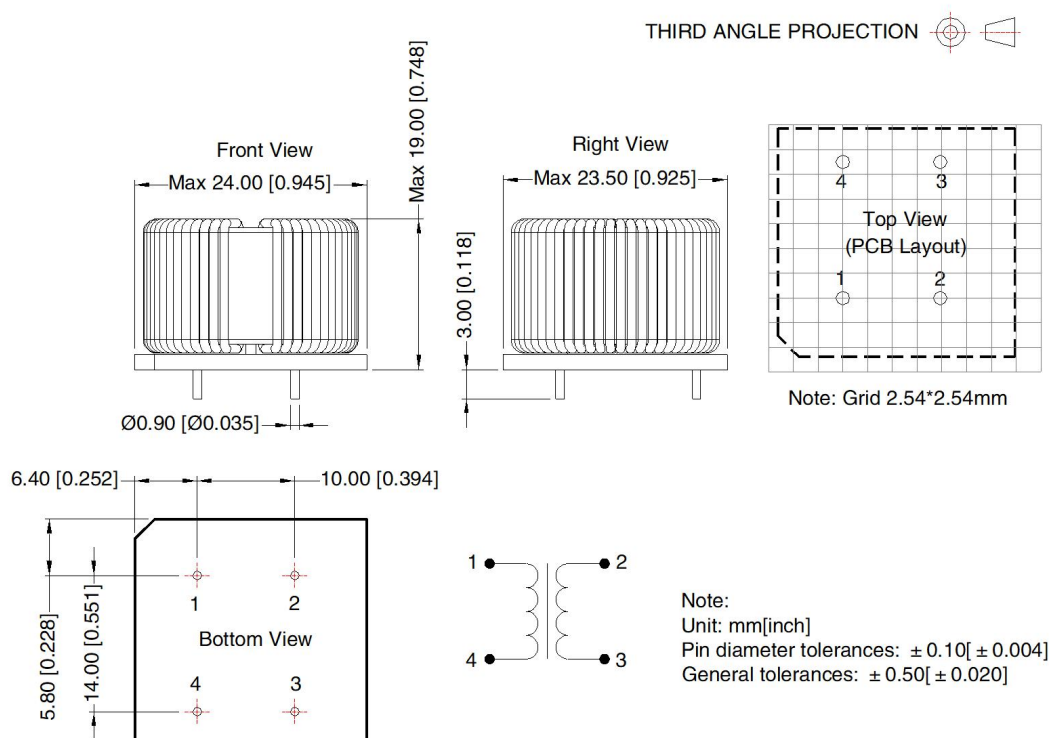


Fig. 5

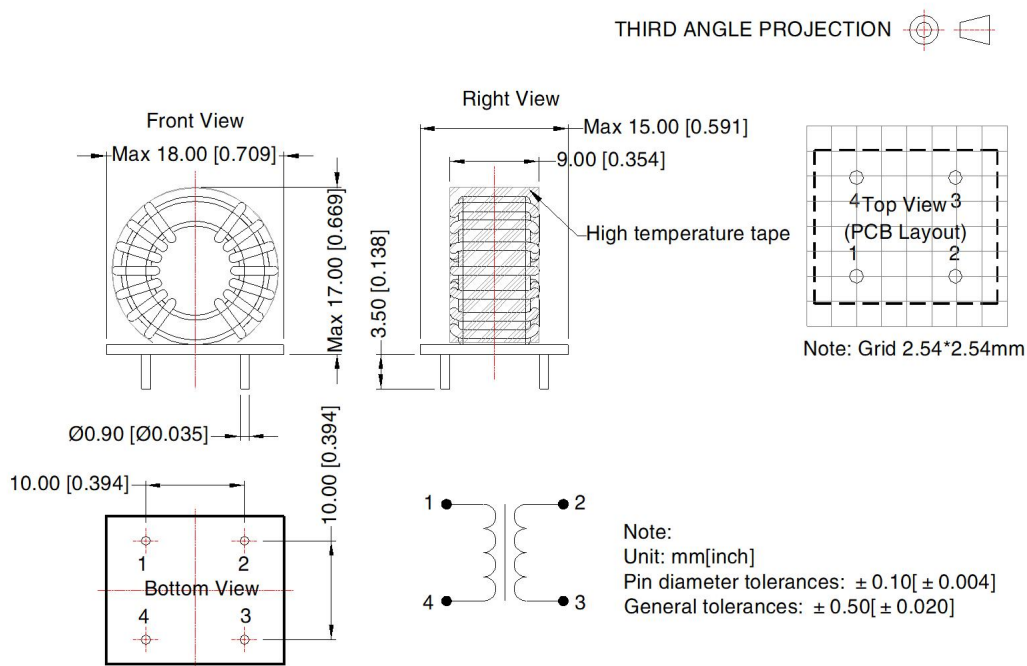


Fig. 6

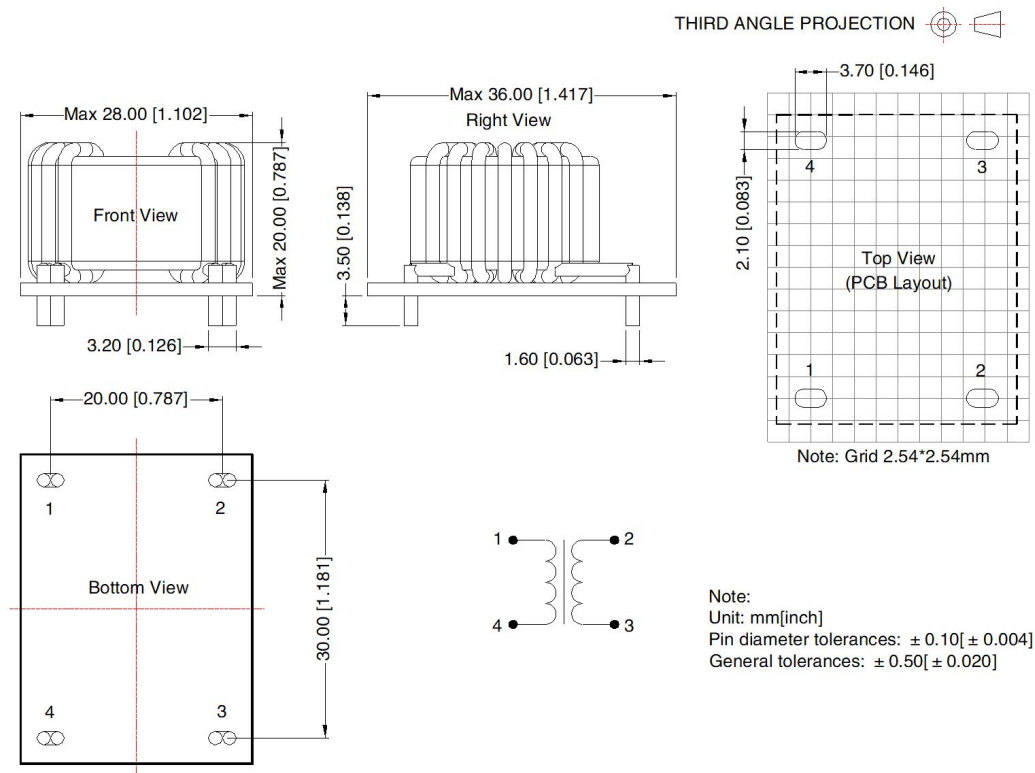


Fig. 7

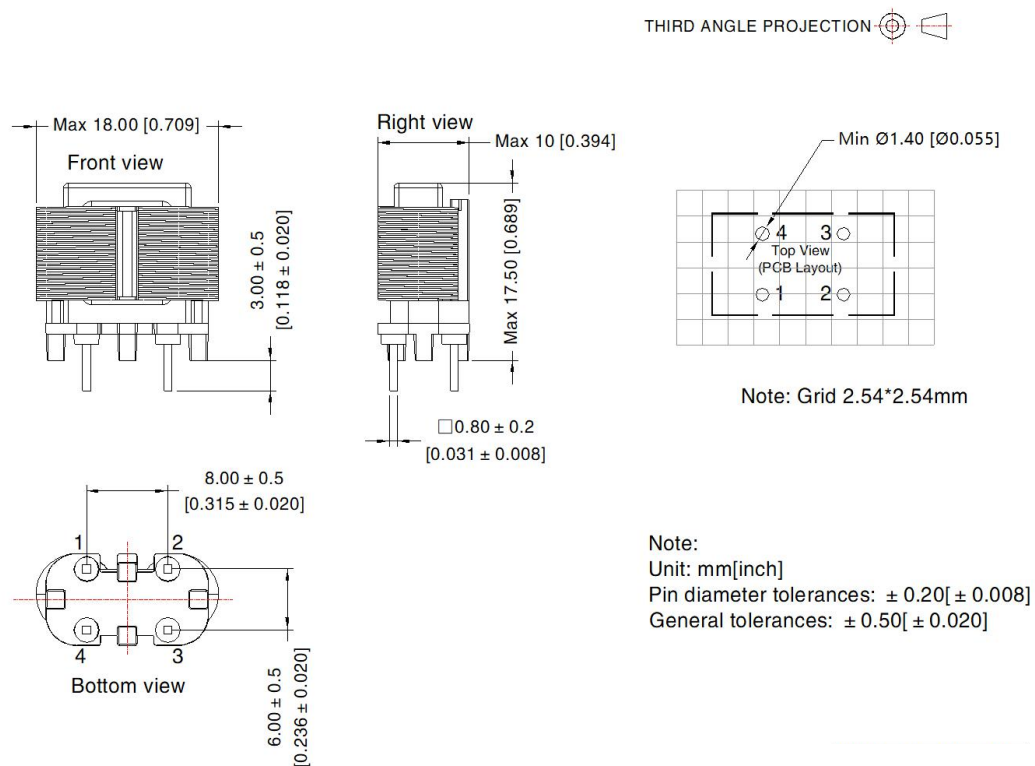


Fig. 8

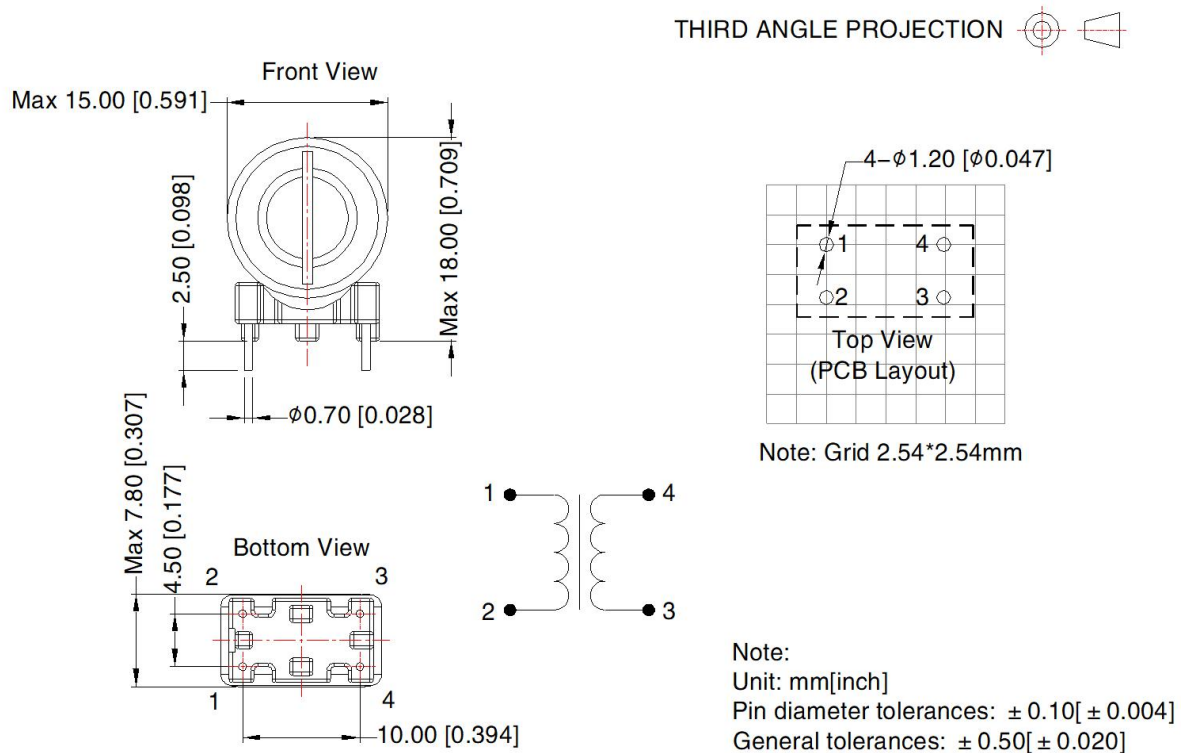


图 9

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  $T_a=25^{\circ}\text{C}$ , 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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