Descriptions

EMC Fllter






RoHS

Features

- Operating ambient temperature range: -40℃ to +105℃ (Include inductor self-heating)
- Isolation:1500VAC(Only for EFL2D-3-103、EFL2D-12-202)/ 2000VDC (Coil-Coil,Leakage current Io≤1mA)

Applications

- Industrial control
- power
- home appliances
- Instrumentation
- Communication
- Civil applications

Selection Guide

Model	Inductance (μH)(TYP.)	Current (A)(max)	DCR(mΩ) (MAX)	Weight (g) (TYP)	Size(L*W*H) (mm)	
EFL2D-0.5-103	10000*2	0.5	500*2	4.5	17*9.6*18	See Figure 1
EFL2D-0.5-153	15000*2		600*2	4.5	17*9.6*18	See Figure 1
EFL2D-0.5-223	22000*2		650*2	4.5	17*9.6*18	See Figure 1
EFL2D-1-102	1000*2	1.0	70*2	4.5	17*9.6*18	See Figure 1
EFL2D-1-222	2200*2		90*2	4.5	17*9.6*18	See Figure 1
EFL2D-1-332	3300*2		100*2	4.5	17*9.6*18	See Figure 1
EFL2D-1-472	4700*2		140*2	4.5	17*9.6*18	See Figure 1
EFL2D-1-682	6800*2		160*2	6.5	19*11*23.5	See Figure 2
EFL2D-1-822	8200*2		180*2	6.5	19*11*23.5	See Figure 2
EFL2D-1-203	20000*2		240*2	5.6	18*10*17.5	See Figure 7
EFL2D-3-351	350*2	3.0	30*2	3.9	17*9.6*18	See Figure 1
EFL2D-3-102	1000*2		40*2	4.5	17*9.6*18	See Figure 1
EFL2D-3-222	2200*2		50*2	4.5	17*9.6*18	See Figure 1
EFL2D-3-472	4700*2		70*2	4.5	17*9.6*18	See Figure 1
EFL2D-3-103	10000*2		50*2	13.8	24.5*22.5*15.5	See Figure 3
EFL2D-6-402	4000*2	6.0	35*2	20.0	24*23.5*19	See Figure 5
EFL2D-6-451	450*2		9*2	6.4	18*15*17	See Figure 6
EFL2D-12-202	2000*2	12.0	145*2	25.2	26.5*25*16.5	See Figure 4

Note:1.The inductance values above were tested at room temperature 25℃. The Inductance of FL2D-3-103, FL2D-12-202 is minimum value, others are typical value.

2.The product picture is for reference only.For details, please refer to the actual product.

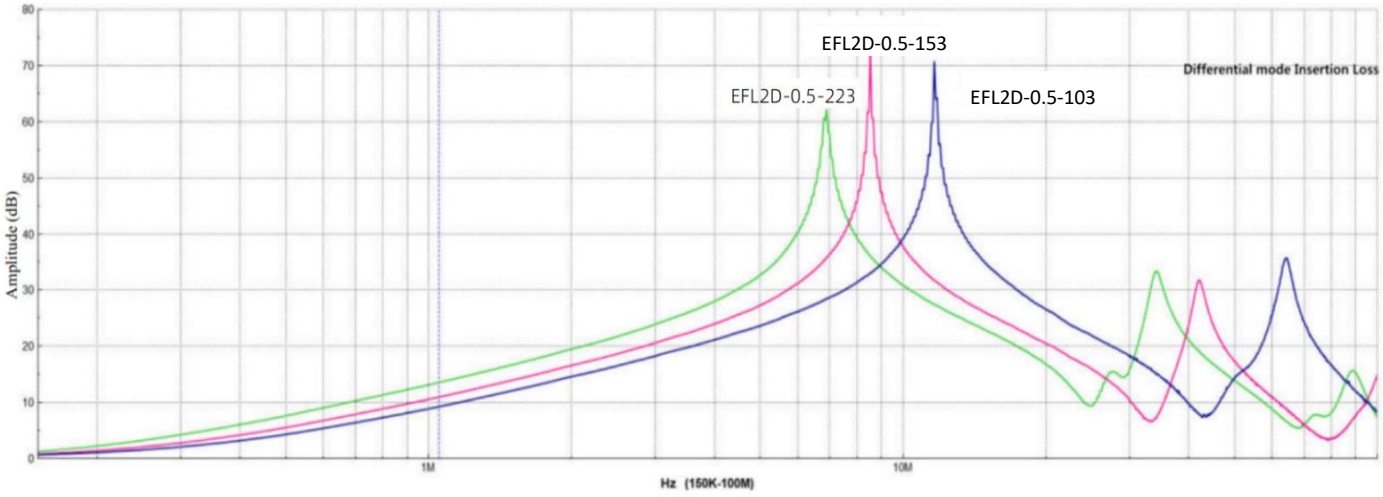
Specifications

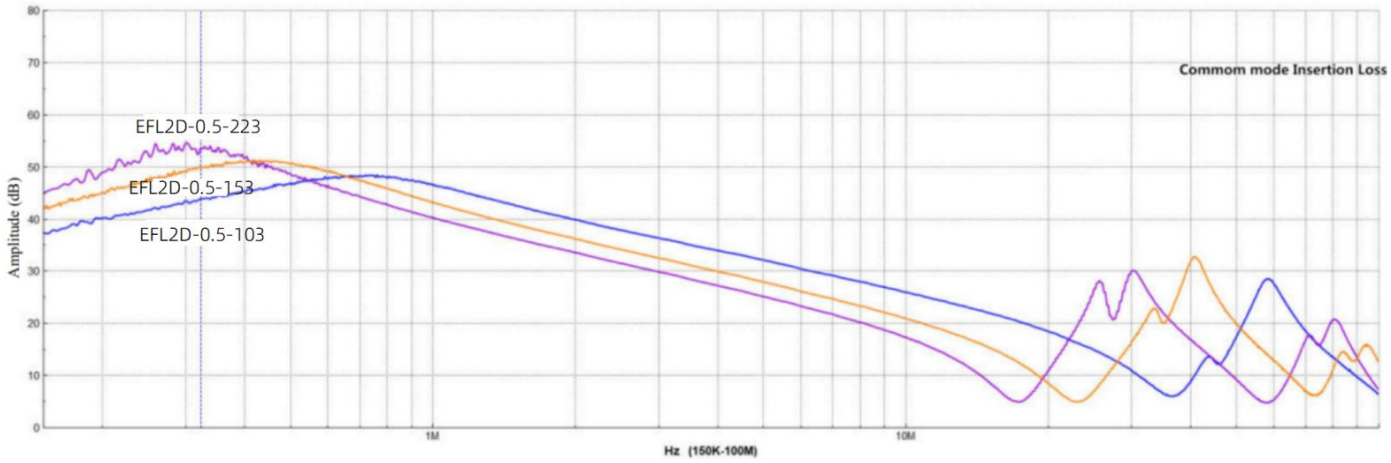
Product Specifications	Item	Operating Conditions		Min.	Typ.	Max.	Unit
General Specifications	Operating Temperature*			-40	--	+105	℃
	Storage Temperature			-40	--	+105	
	Welding Temperature**	Wave soldering, maximum 10 seconds		+255	+260	+265	
		Manual soldering, with the solder joint 1.5mm away from the shell, for 10 seconds.		--	--	+300	
	Storage Humidity	Non-condensing		--	--	95	%RH
	Inductance Error Range	fo=1kHz, Uo=0.3V	EFL2D-3-351	-50	--	--	%
			Other	-35	--	--	
	Isolation	Leakage current Io≤1mA, Electric Strength Test for 1min.	Coil-coil	--	--	2000	VDC
		Leakage current Io≤5mA, Electric Strength Test for 1min.(only for EFL2D-3-103, EFL2D-12-202)	Coil-coil	--	--	1500	VAC
			Coil-core	--	--	1000	
	Vibration	EFL2D-3-103、EFL2D-12-202、EFL2D-6-402、EFL2D-6-451		IEC60077, IEC 61373 - Category 1, Grade B			

Note: *Operating Temperature range includes inductor self heating.

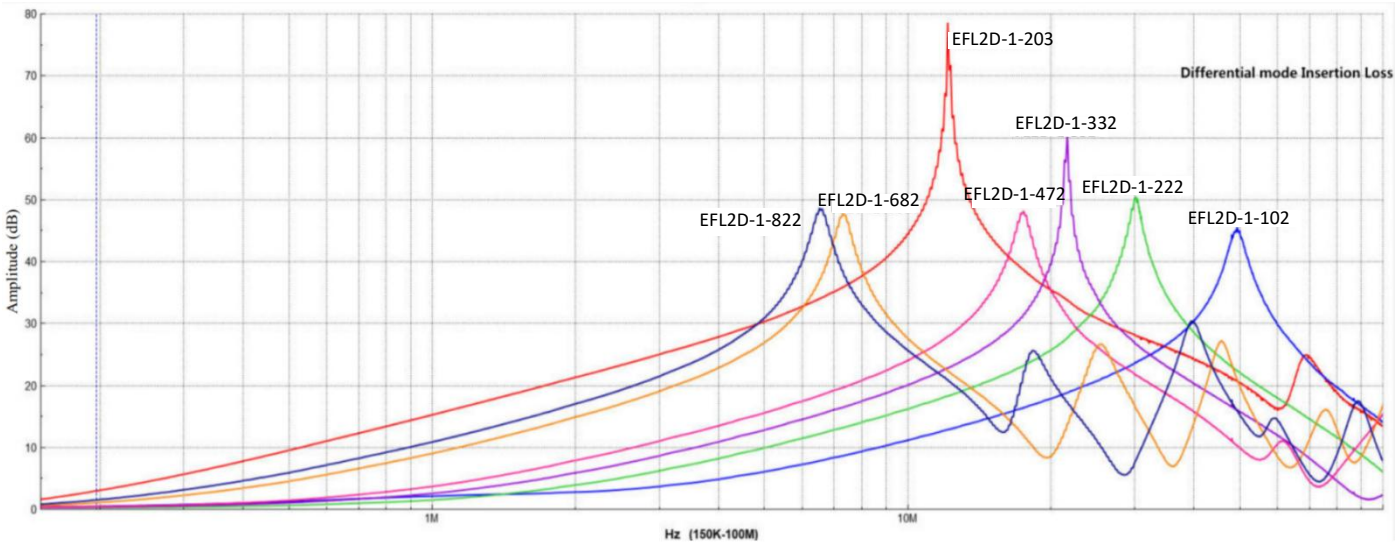
**2.The soldering temperature resistance of the pins is not the actual set temperature of the soldering iron, but the temperature required for a good solder joint. The actual set temperature by the customer needs to be comprehensively set based on the thickness of the PCB, the size of the copper cladding,the power of the soldering iron, and the selection of the soldering iron tip.

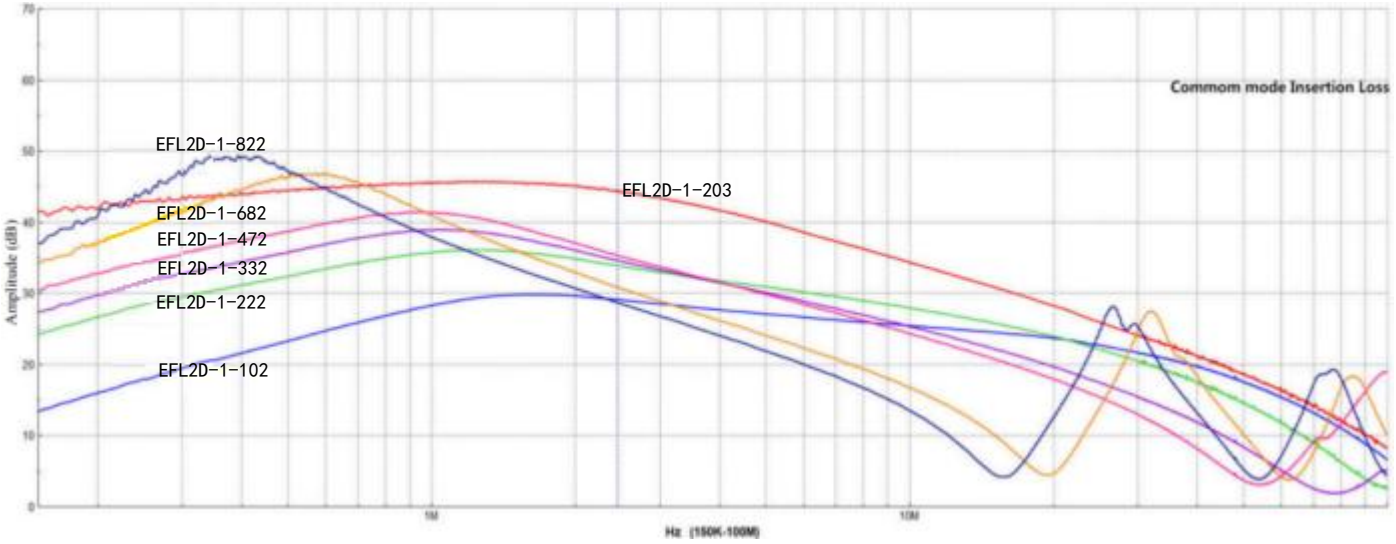
Insertion Loss Specifications (reference value)



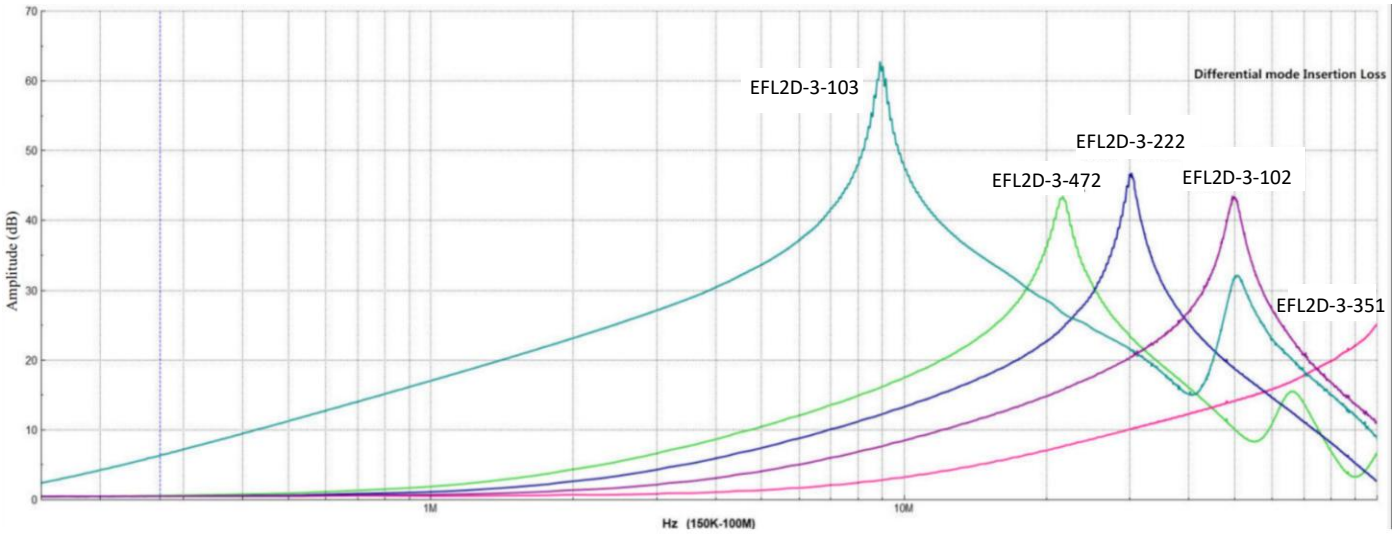


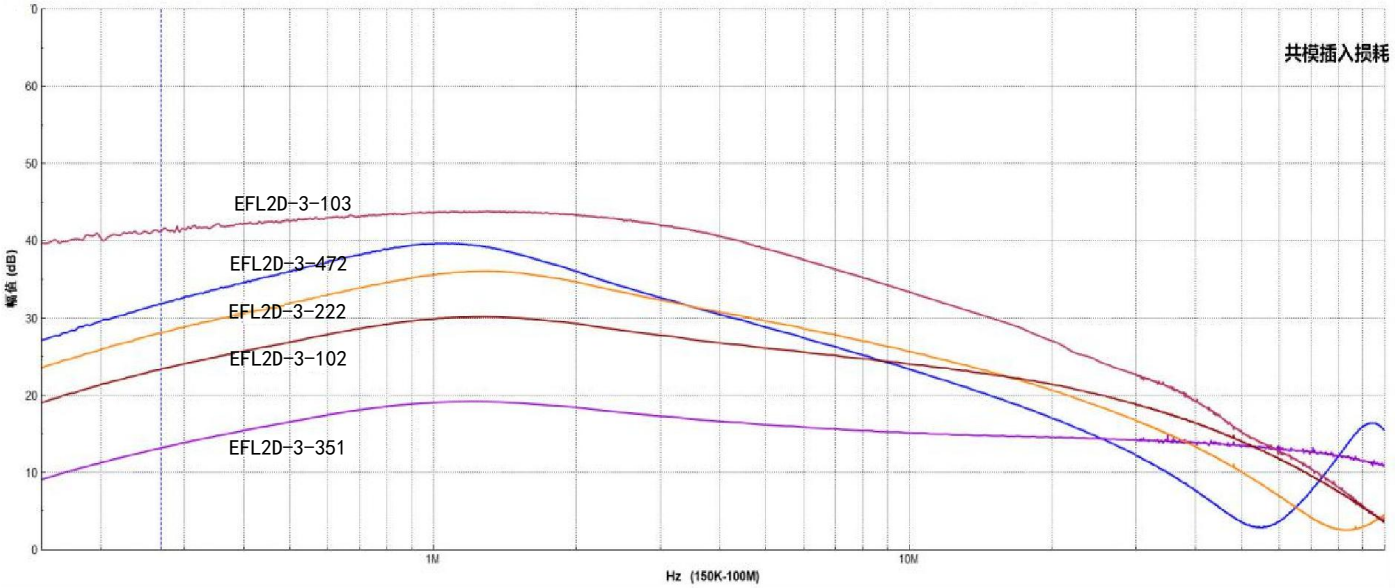
EFL2D-0.5-XXX



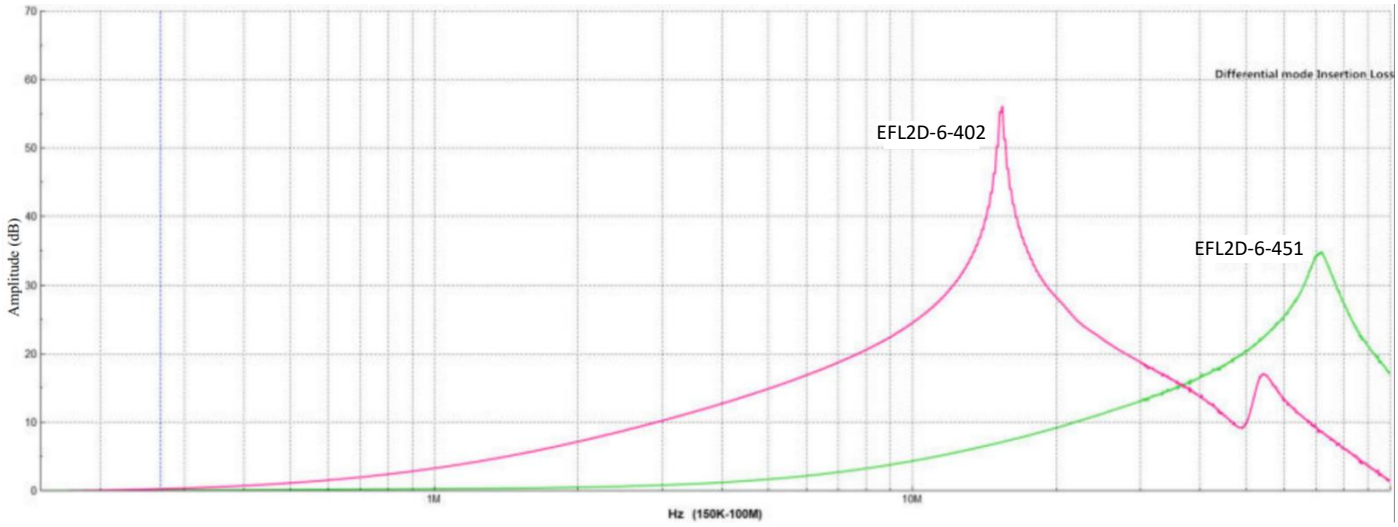


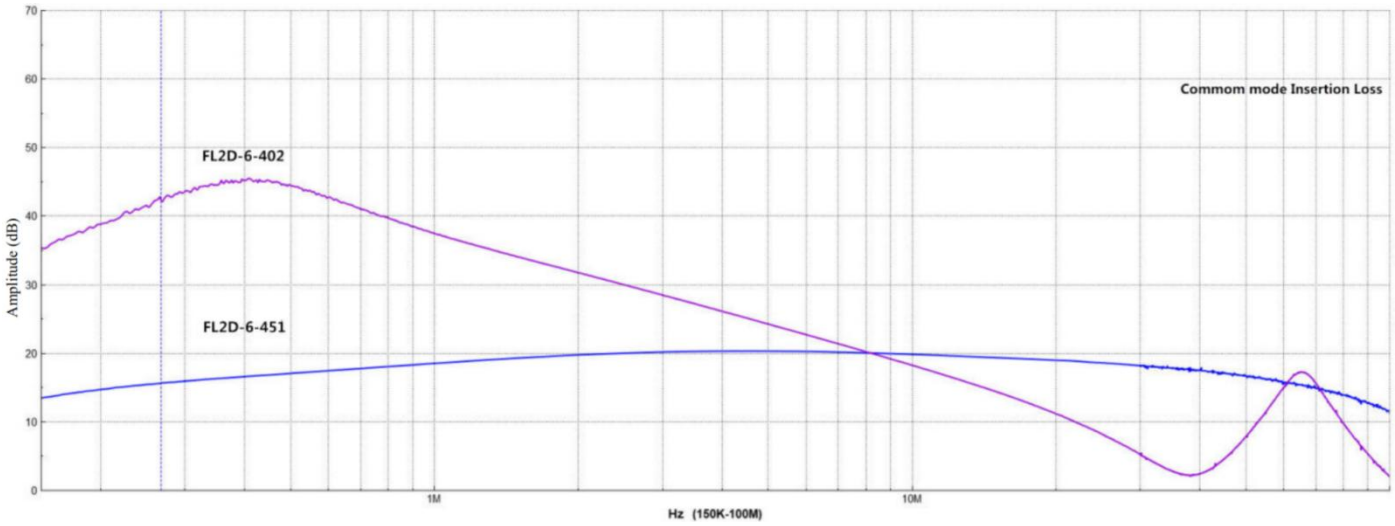
EFL2D-1-XXX


Differential mode Insertion Loss
EFL2D-3-103
EFL2D-3-222
EFL2D-3-472
EFL2D-3-102
EFL2D-3-351
Amplitude (dB)
Hz (150K-100M)
1M
10M

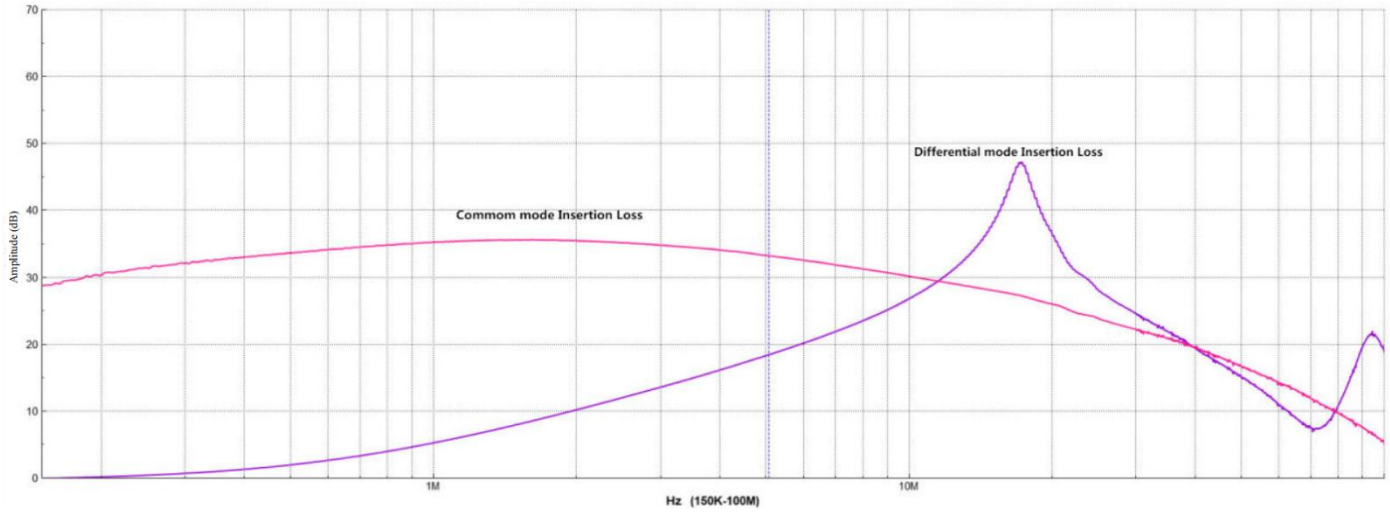

共模插入损耗
EFL2D-3-103
EFL2D-3-472
EFL2D-3-222
EFL2D-3-102
EFL2D-3-351
幅值 (dB)
Hz (150K-100M)
1M
10M

EFL2D-3-XXX


Differential mode Insertion Loss
EFL2D-6-402
EFL2D-6-451
Amplitude (dB)
Hz (150K-100M)
1M
10M

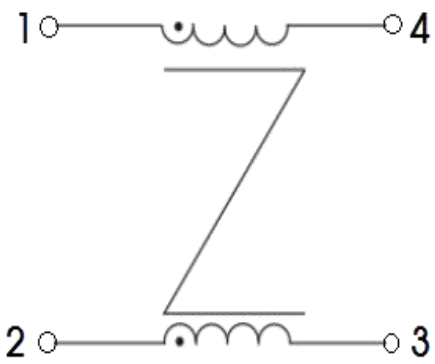


EFL2D-6-XXX



EFL2D-12-XXX

Pin Function



Dimensions and Recommended

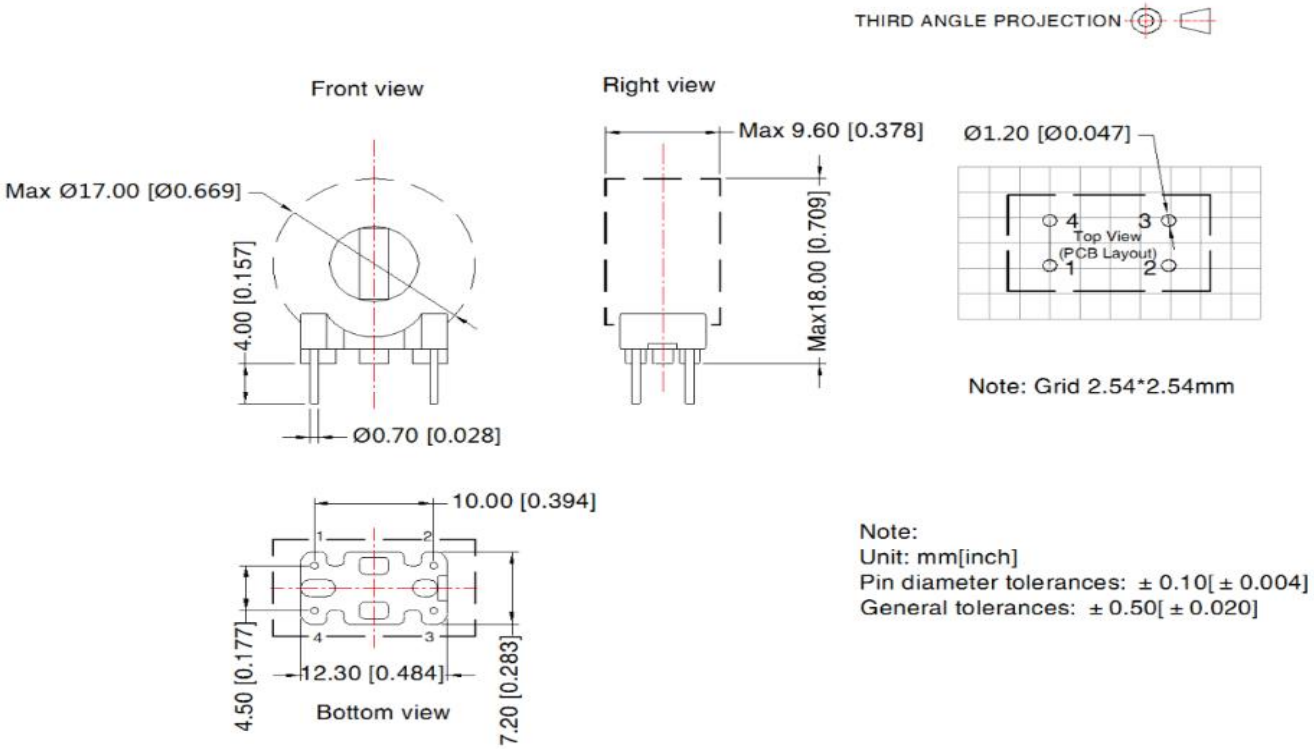


Fig. 1

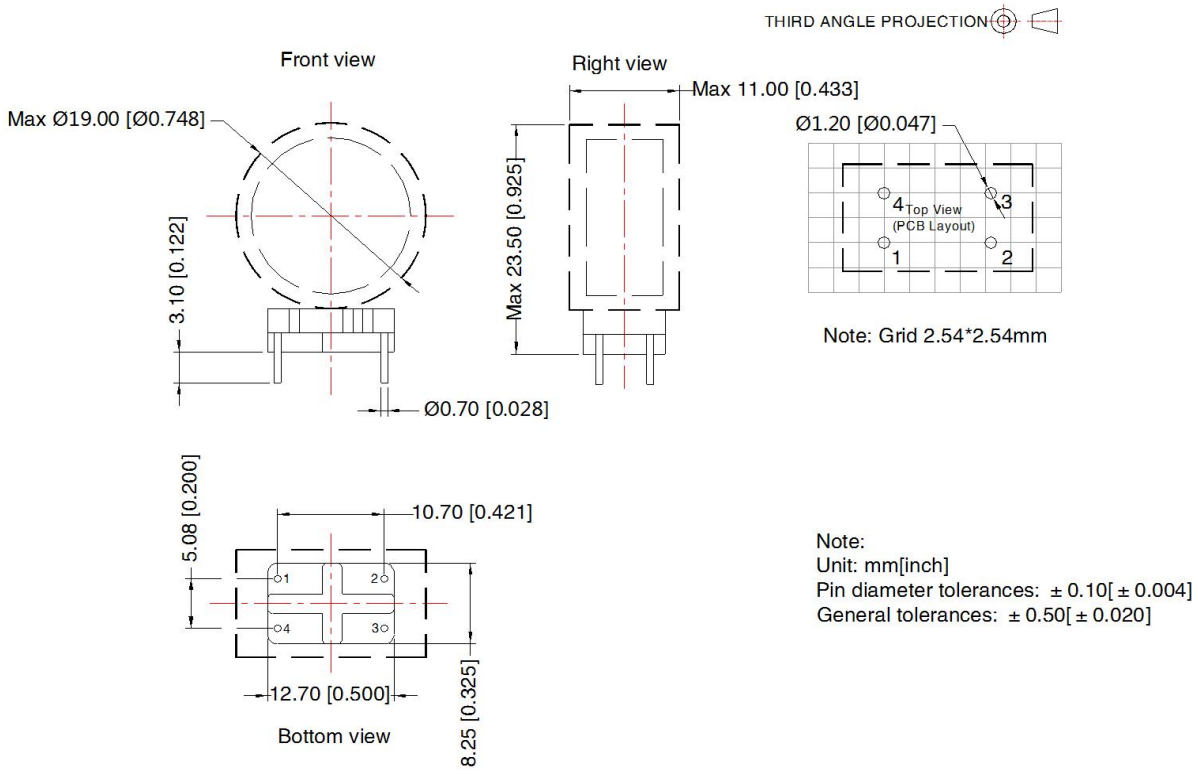


Fig. 2

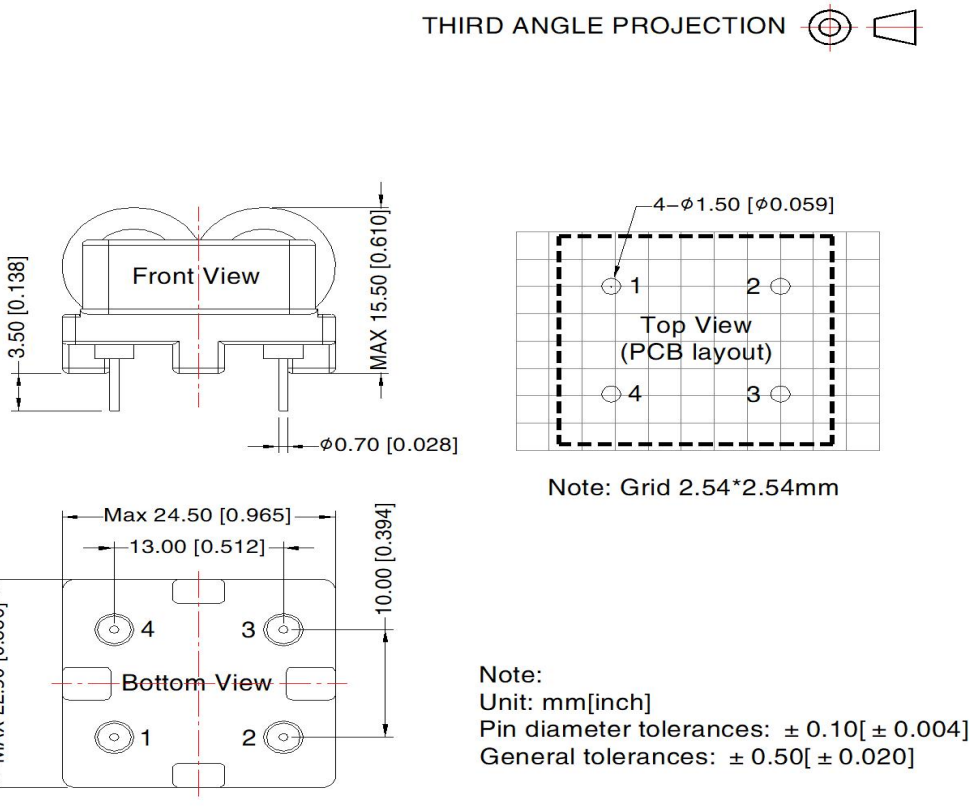

THIRD ANGLE PROJECTION
Front View
3.50 [0.138]
MAX 15.50 [0.610]
ϕ0.70 [0.028]
4–ϕ1.50 [ϕ0.059]
1
2
Top View
(PCB layout)
4
3
Note: Grid 2.54*2.54mm
Max 24.50 [0.965]
13.00 [0.512]
10.00 [0.394]
MAX 22.50 [0.886]
4
3
Bottom View
1
2
Note:
Unit: mm[inch]
Pin diameter tolerances: ± 0.10[± 0.004]
General tolerances: ± 0.50[± 0.020]

Fig. 3

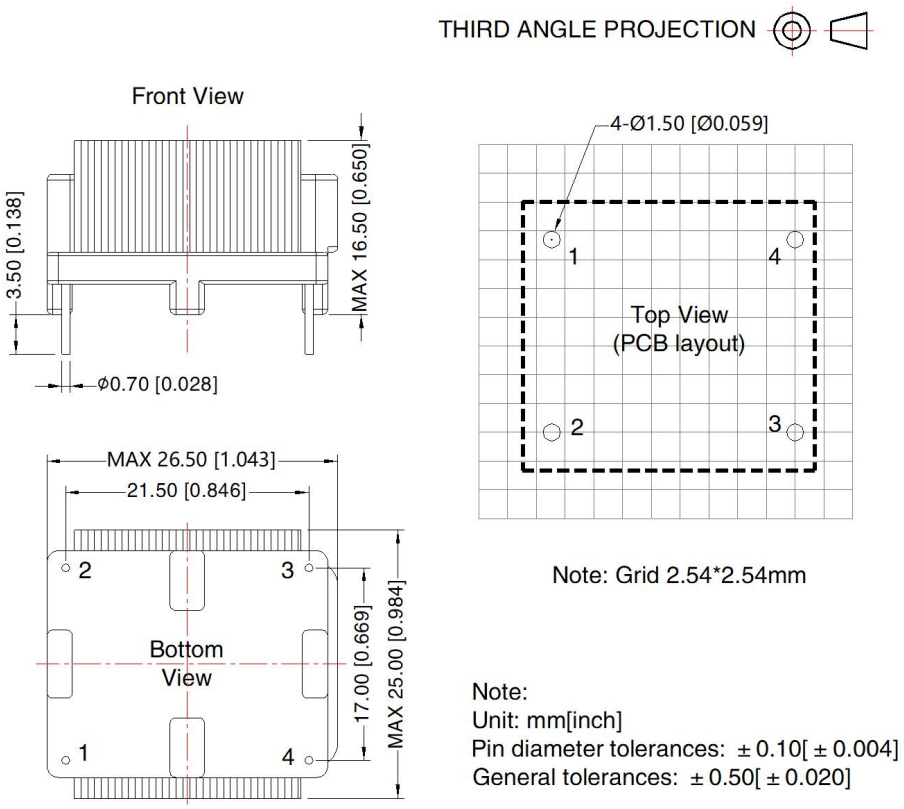

THIRD ANGLE PROJECTION
Front View
3.50 [0.138]
MAX 16.50 [0.650]
ϕ0.70 [0.028]
4-Ø1.50 [Ø0.059]
1
4
Top View
(PCB layout)
2
3
Note: Grid 2.54*2.54mm
MAX 26.50 [1.043]
21.50 [0.846]
2
3
Bottom
View
1
4
17.00 [0.669]
MAX 25.00 [0.984]
Note:
Unit: mm[inch]
Pin diameter tolerances: ± 0.10[± 0.004]
General tolerances: ± 0.50[± 0.020]

Fig. 4

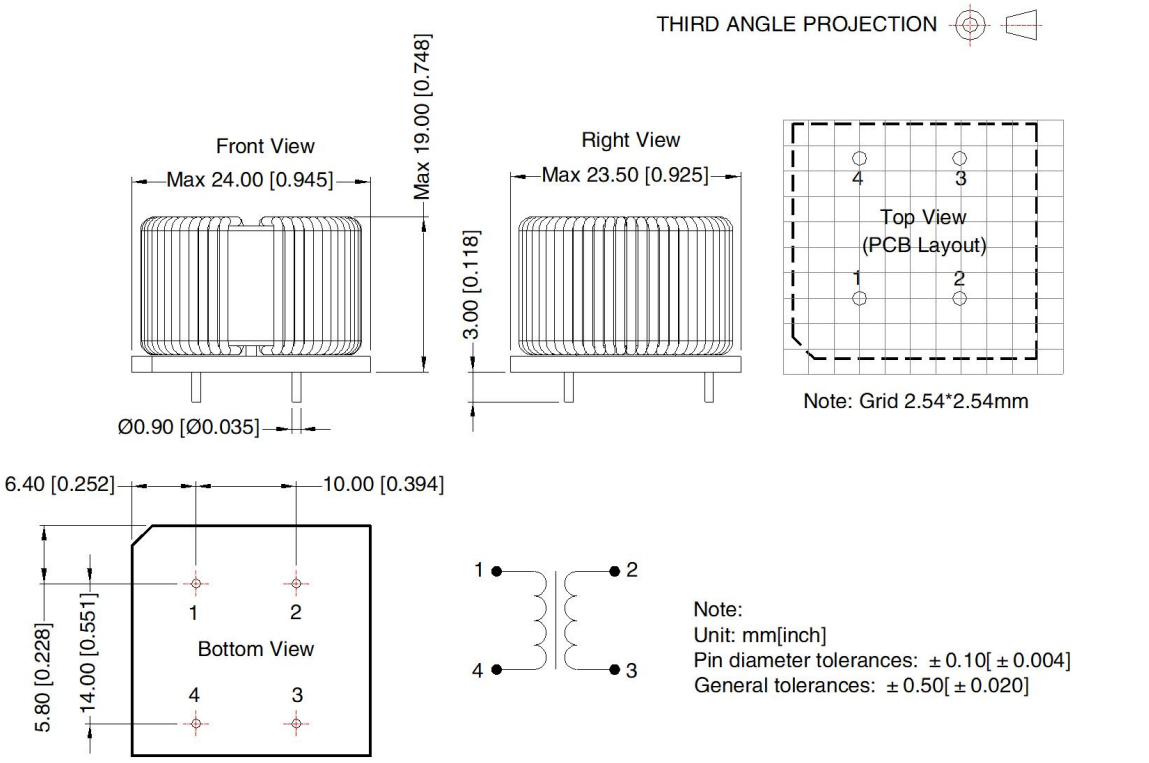

THIRD ANGLE PROJECTION
Front View
Max 24.00 [0.945]
Max 19.00 [0.748]
Ø0.90 [Ø0.035]
Right View
Max 23.50 [0.925]
3.00 [0.118]
Top View
(PCB Layout)
Note: Grid 2.54*2.54mm
6.40 [0.252]
10.00 [0.394]
5.80 [0.228]
14.00 [0.551]
Bottom View
Note:
Unit: mm[inch]
Pin diameter tolerances: ± 0.10[± 0.004]
General tolerances: ± 0.50[± 0.020]

Fig. 5

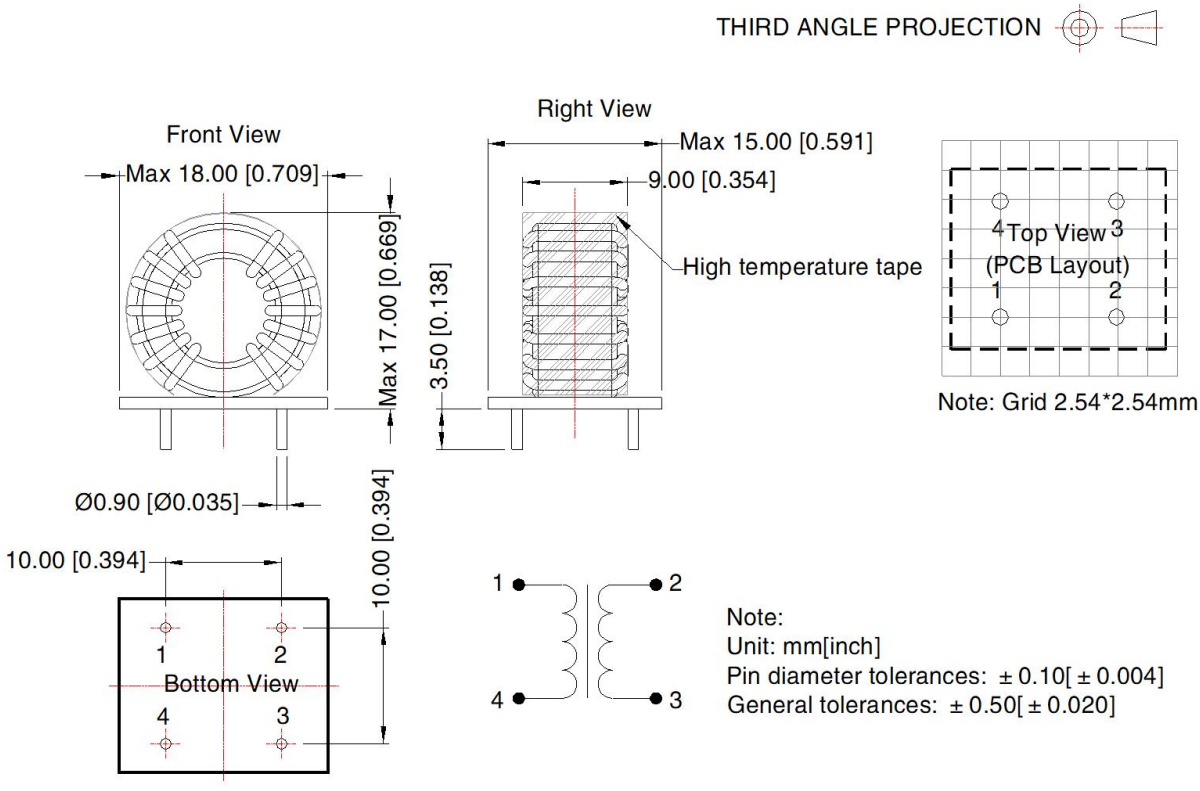

THIRD ANGLE PROJECTION
Front View
Max 18.00 [0.709]
Max 17.00 [0.669]
Ø0.90 [Ø0.035]
Right View
Max 15.00 [0.591]
9.00 [0.354]
High temperature tape
3.50 [0.138]
Top View
(PCB Layout)
Note: Grid 2.54*2.54mm
10.00 [0.394]
10.00 [0.394]
Bottom View
Note:
Unit: mm[inch]
Pin diameter tolerances: ± 0.10[± 0.004]
General tolerances: ± 0.50[± 0.020]

Fig. 6

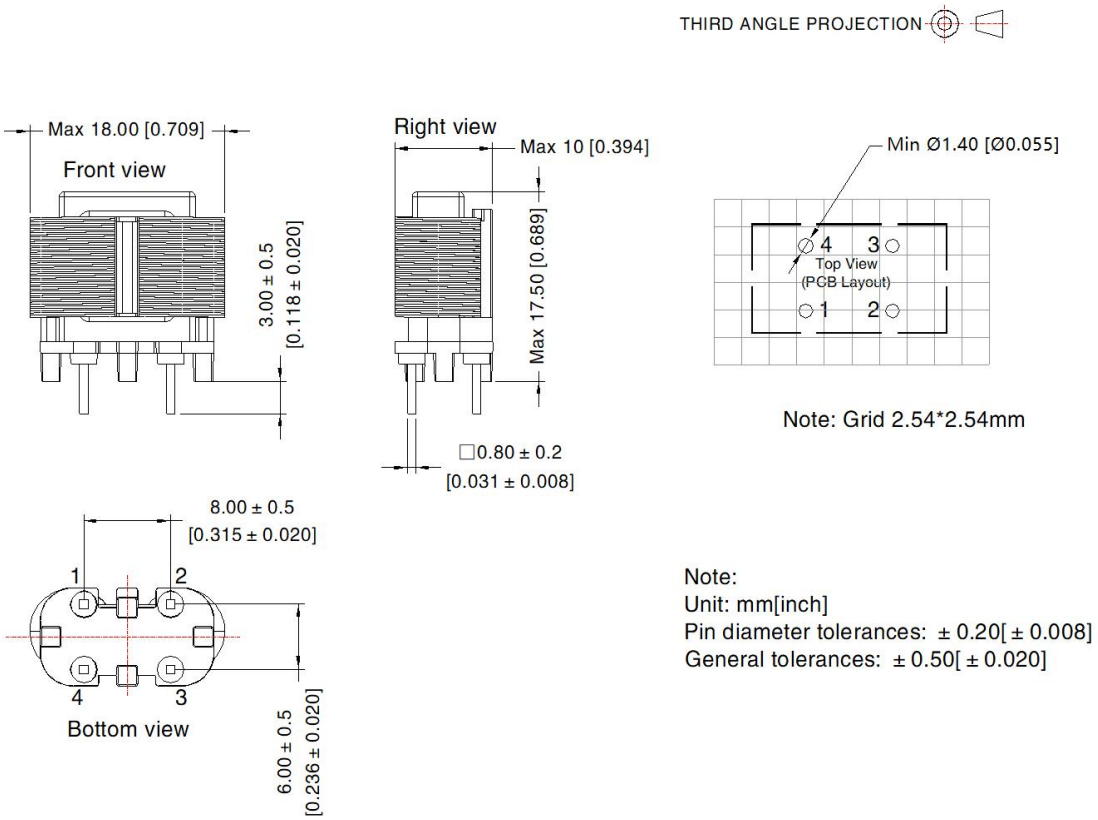


Fig. 7

Note:

1. If the product is not operated within the required load range, the product performance cannot be guaranteed to comply with all parameters in the datasheet;
2. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25℃, humidity<75% with nominal input voltage and rated output load;
3. All index testing methods in this datasheet are based on our company corporate standards;
4. Products are related to laws and regulations: see "Features" and "EMC";
5. Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.