Wire Wound Type Common Mode Filter HSF2012F2SO-SERIES-H

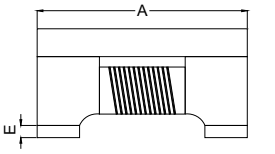
1. Features

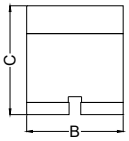
1. High common mode impedance at high frequency cause excellent noise suppression performance.
2. HSF2012F2SO series realizes small size and low profile. 2.0x1.2x1.2 mm.
3. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
4. For USB3.1G2 & HDMI2.0
5. Operating temperature -40~+125℃ (Including self - temperature rise).

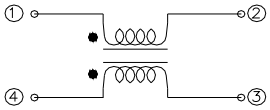
Halogen-free

RoHS

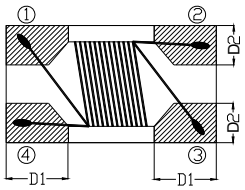
2. Dimension







Schematic Diagram



Bottom View

Series	A(mm)	B(mm)	C(mm)	D1(mm)	D2(mm)	E(mm)
2012F2SO	2.00±0.20	1.20±0.20	1.20±0.20	0.50±0.10	0.51±0.10	0.15±0.10

3. Part Numbering

HSF	2012	F	2	S	O	-	600	T	03	-	H
A	B	C	D	E	F		G	H	I		J

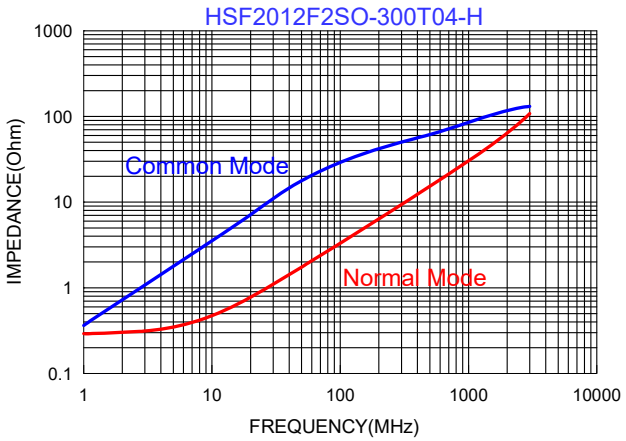
A: Series
B: Dimension
C: Material — Ferrite Core
D: Number of Lines — 2=2 lines
E: Type — S=Shielded, N=Unshielded
F: Category Code — Industrial Grade
G: Impedance — 600=60Ω
H: Packaging — T=Taping and Reel
I : Rated Current — 03=300mA
J: Control S/N

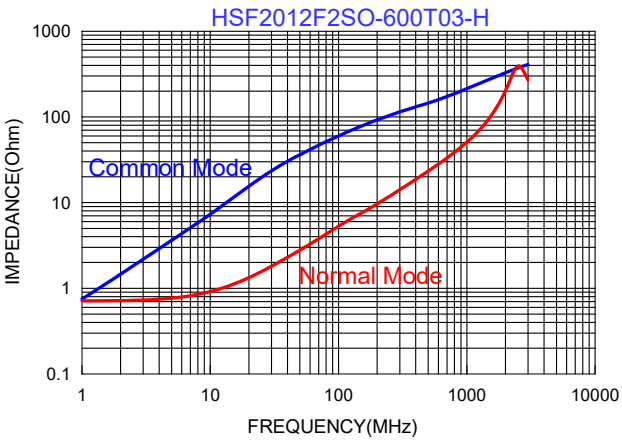
4. Specification

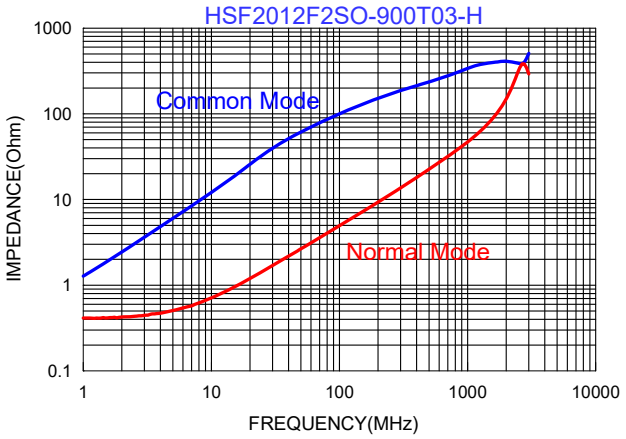
TAI-TECH Part Number	Common mode Impedance (Ω)	Test Frequency (MHz)	DCR (Ω) max.	Rated Current (mA) max.	Rated Volt. (Vdc) max.	Withstand Volt. (Vdc) max.	Insulation Resistance (Ω) min.
HSF2012F2SO-300T04-H	30±25%	100	0.20	400	50	125	10M
HSF2012F2SO-600T03-H	60±25%	100	0.30	300	50	125	10M
HSF2012F2SO-900T03-H	90±25%	100	0.30	300	50	125	10M
HSF2012F2SO-121T03-H	120±25%	100	0.35	330	50	125	10M

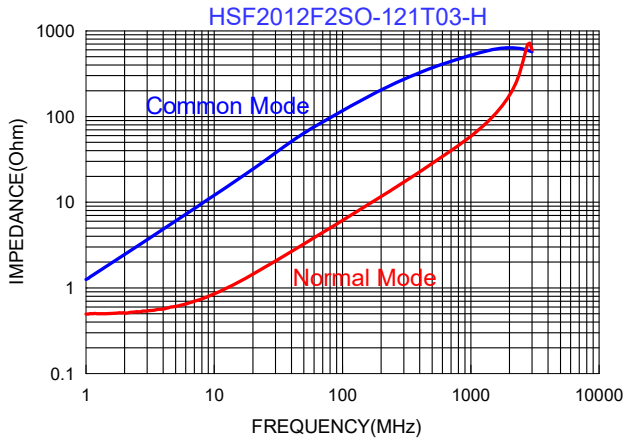
Note:

- All test data referenced to 25℃ ambient.


HSF2012F2SO-300T04-H
IMPEDANCE(Ohm)
1000
100
10
1
0.1
Common Mode
Normal Mode
1
10
100
1000
10000
FREQUENCY(MHz)


HSF2012F2SO-600T03-H
IMPEDANCE(Ohm)
1000
100
10
1
0.1
Common Mode
Normal Mode
1
10
100
1000
10000
FREQUENCY(MHz)

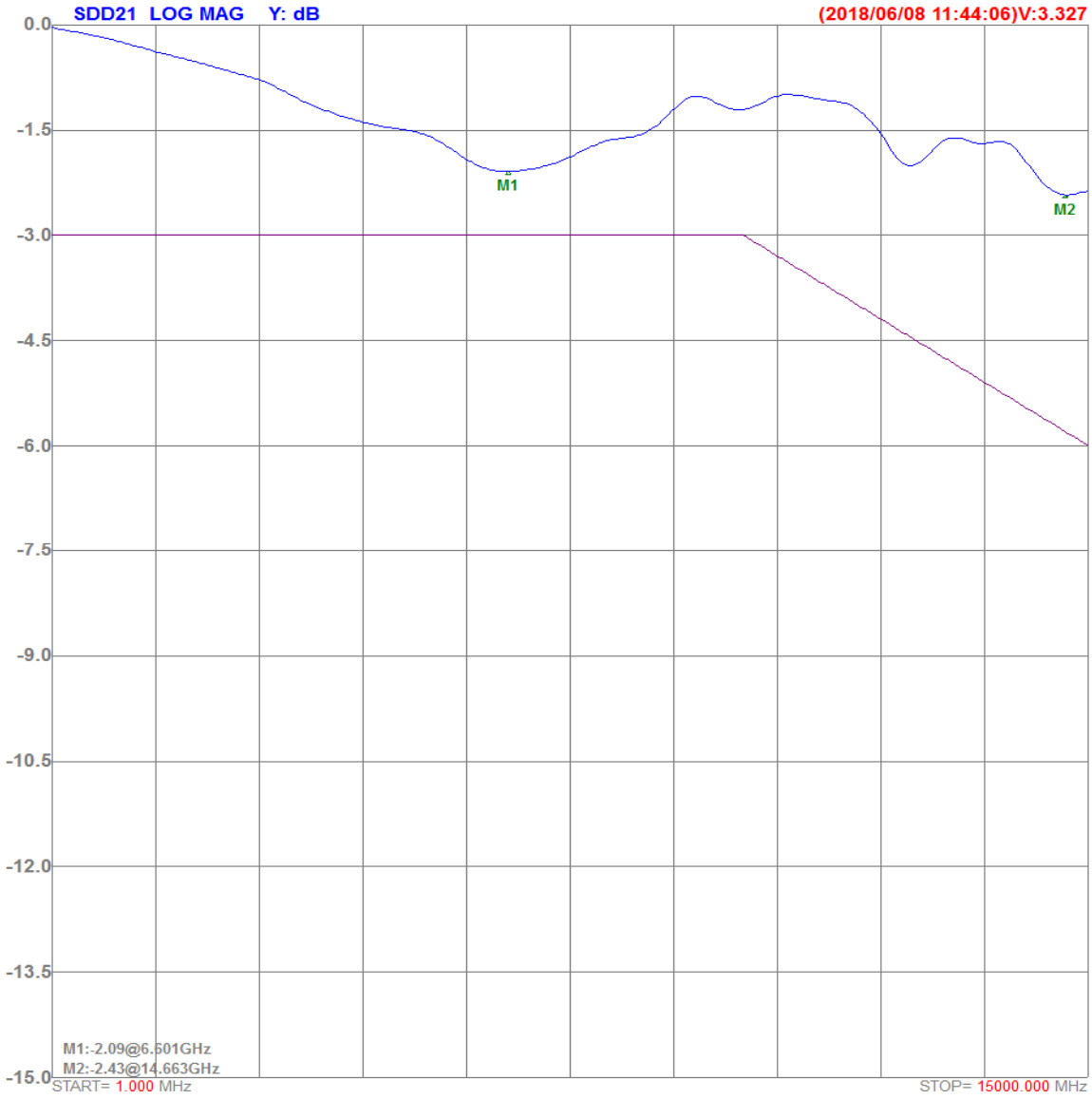

HSF2012F2SO-900T03-H
IMPEDANCE(Ohm)
1000
100
10
1
0.1
Common Mode
Normal Mode
1
10
100
1000
10000
FREQUENCY(MHz)


HSF2012F2SO-121T03-H
IMPEDANCE(Ohm)
1000
100
10
1
0.1
Common Mode
Normal Mode
1
10
100
1000
10000
FREQUENCY(MHz)

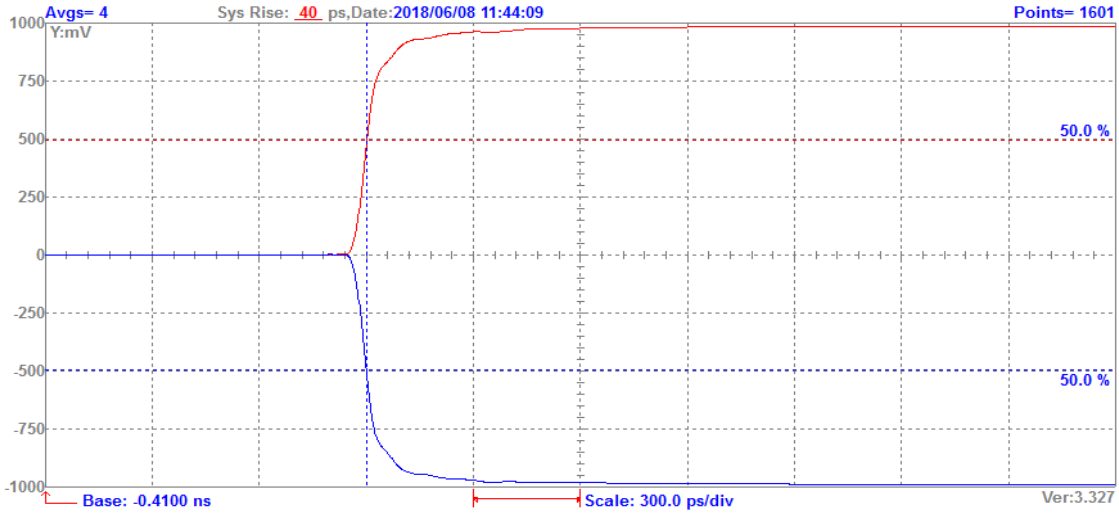
HSF2012F2SO-300T04-H

USB3.1 Choke Insertion Loss Graphic result

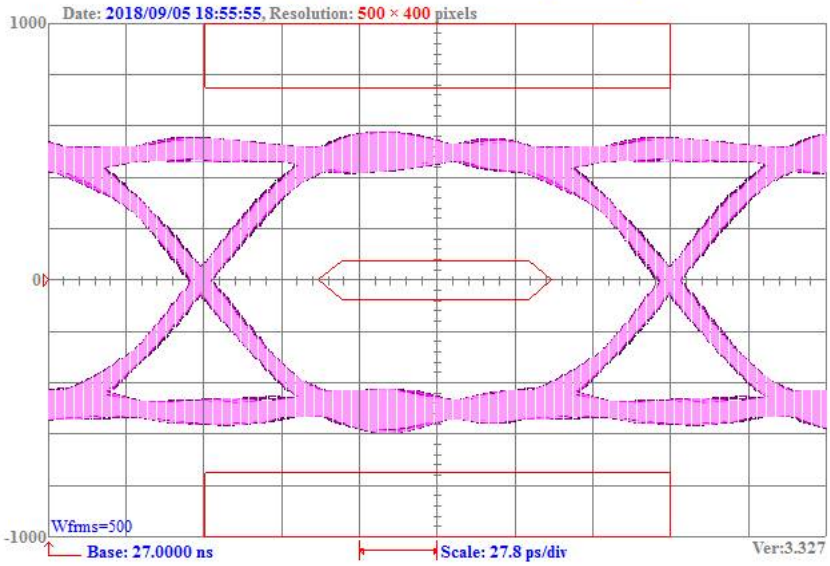
***C1* -(PASS)**



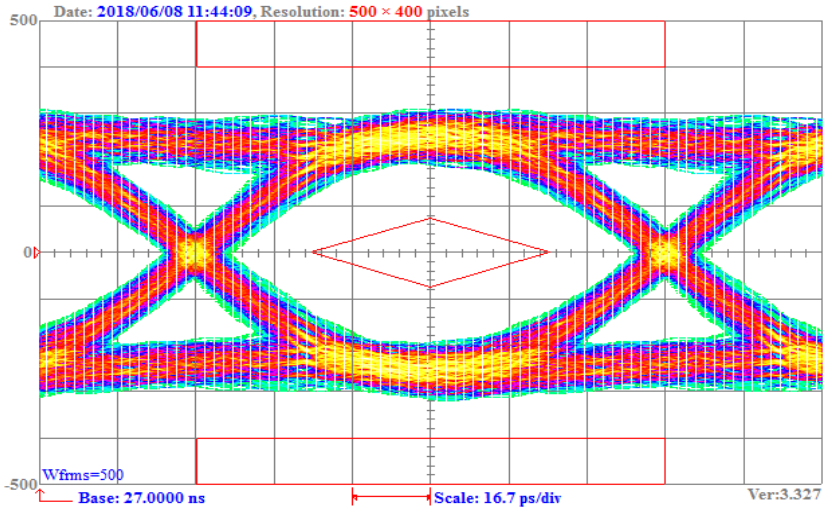
USB3.1 Choke Intra Skew Graphic result



HDMI2.0 Choke Eye Diagram with-25ps Graphic result



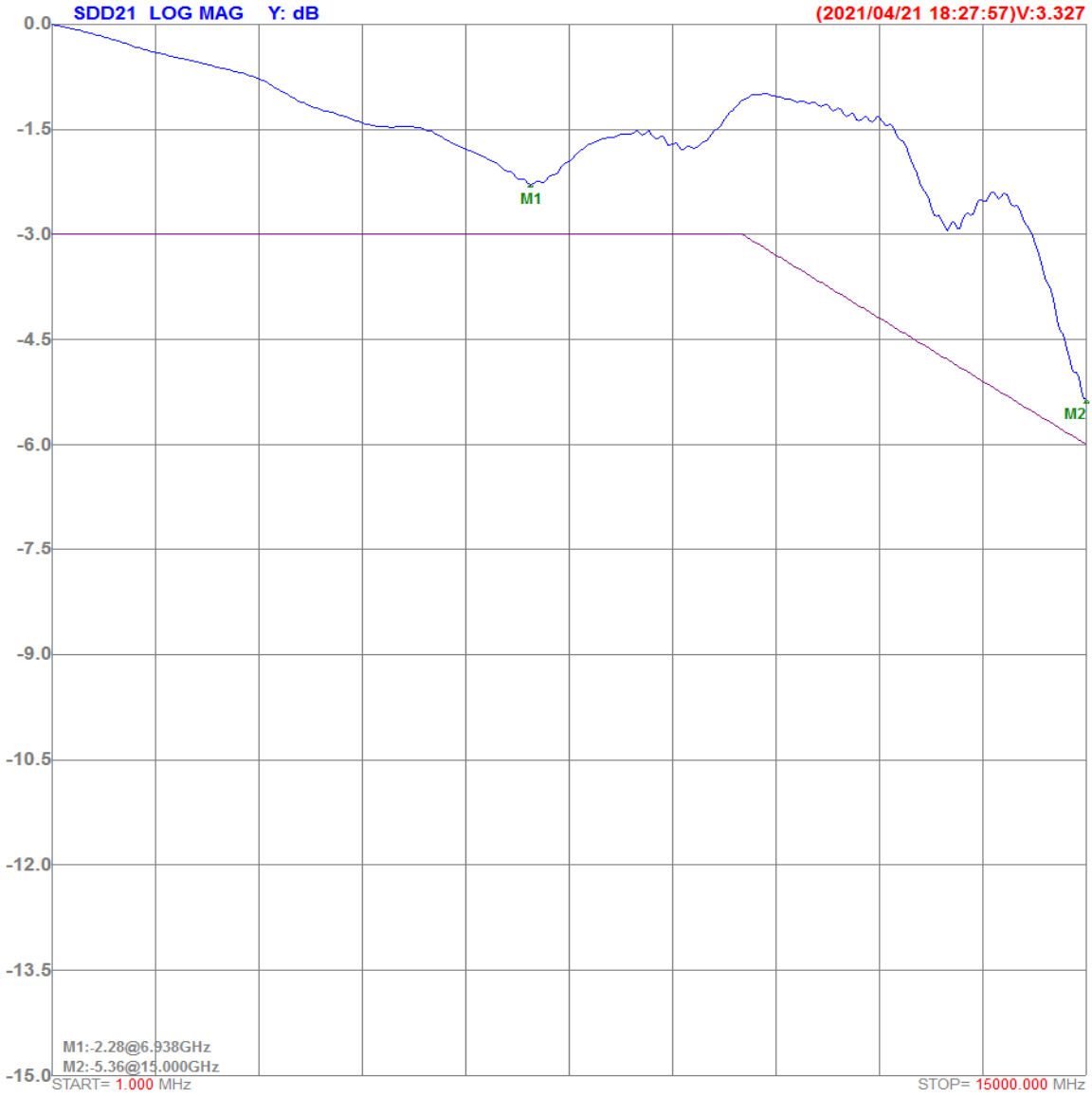
USB3.1 Choke Eye Diagram Graphic result



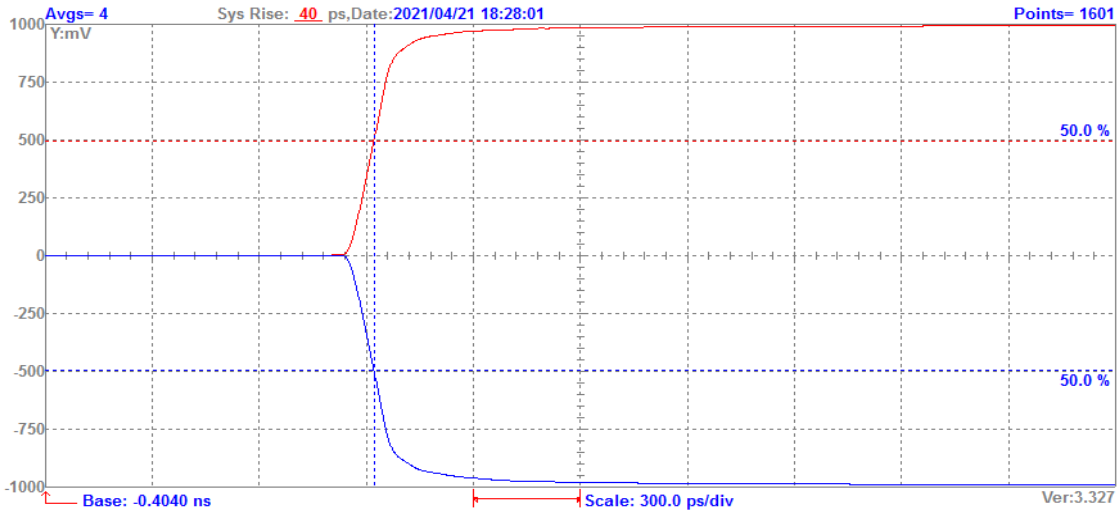
HSF2012F2SO-600T03-H

USB3.1 Choke Insertion Loss Graphic result

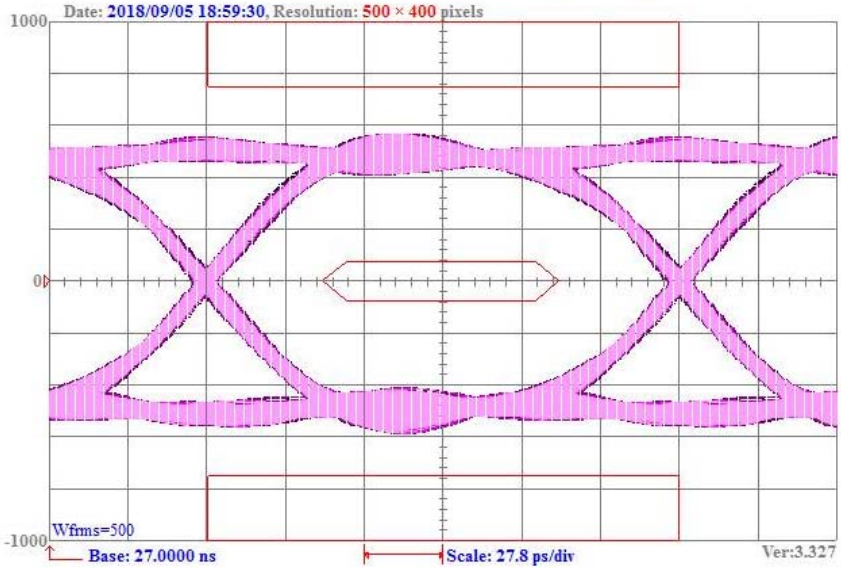
C1 -(PASS)



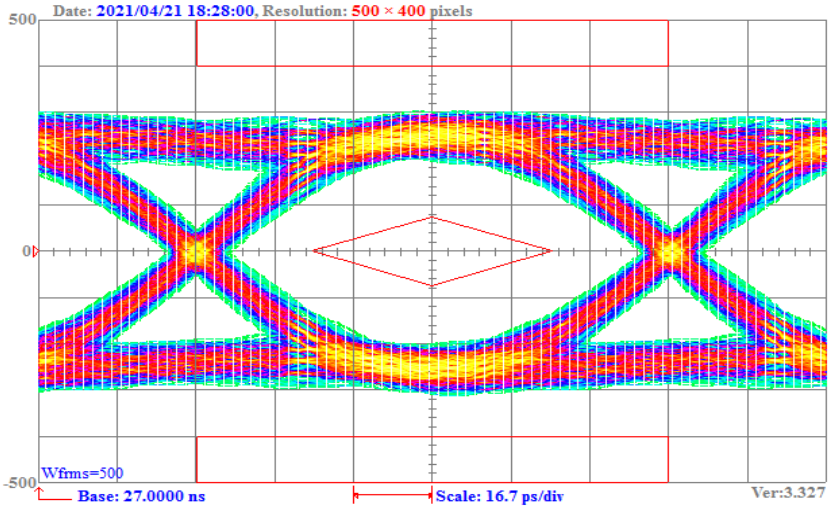
USB3.1 Choke Intra Skew Graphic result



HDMI2.0 Choke Eye Diagram with-25ps Graphic result



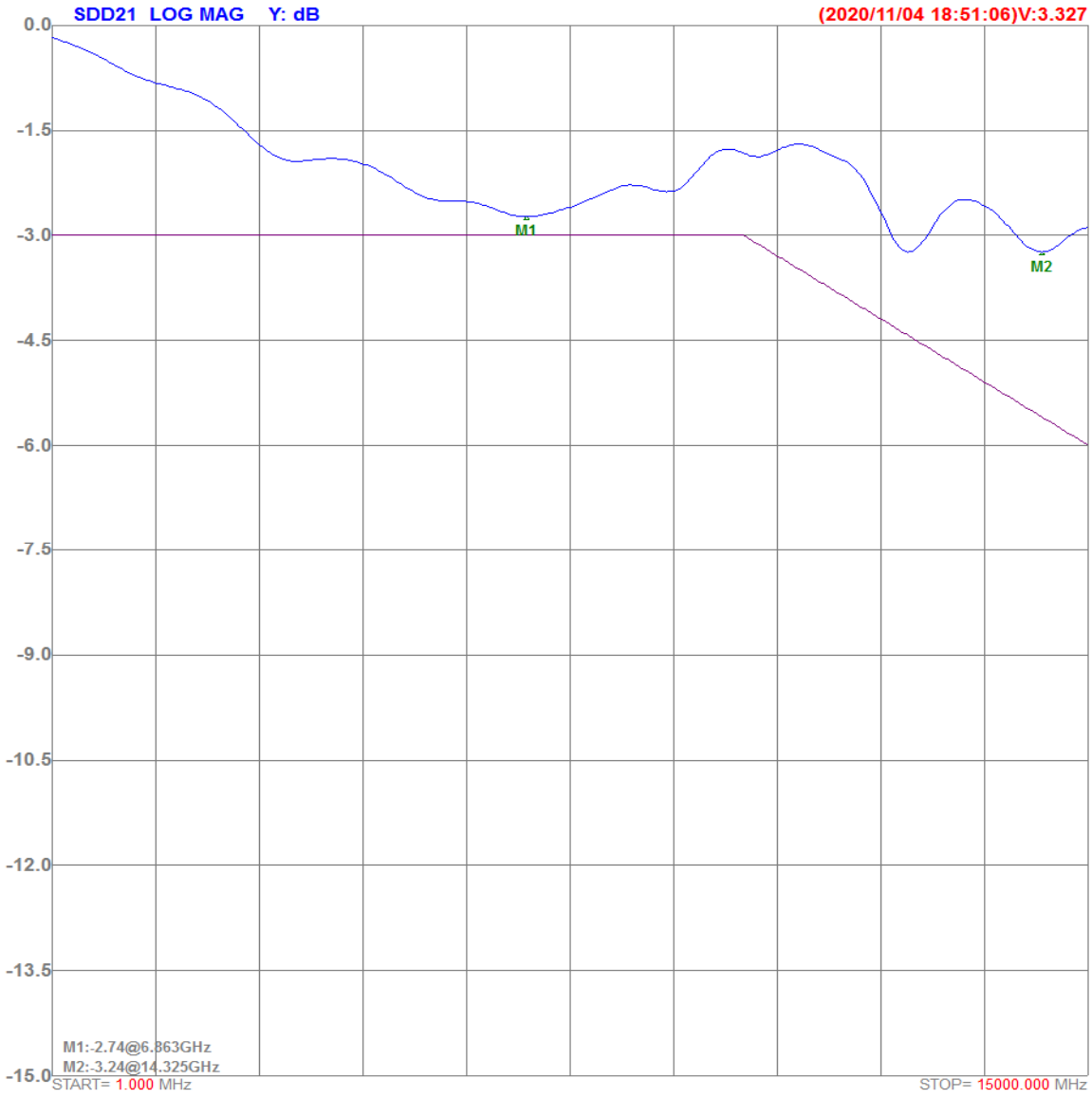
USB3.1 Choke Eye Diagram Graphic result



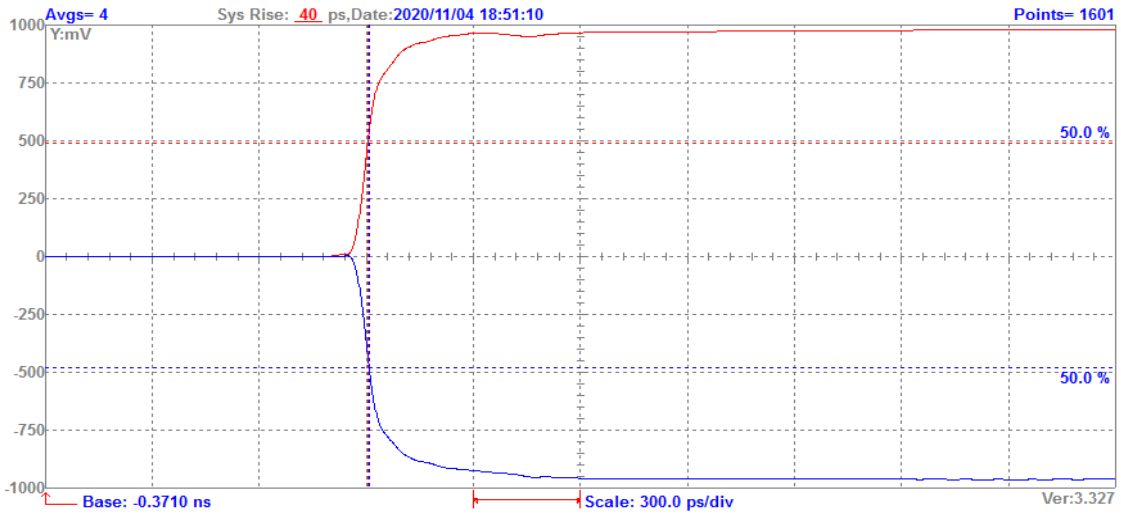
HSF2012F2SO-900T03-H

USB3.1 Choke Insertion Loss Graphic result

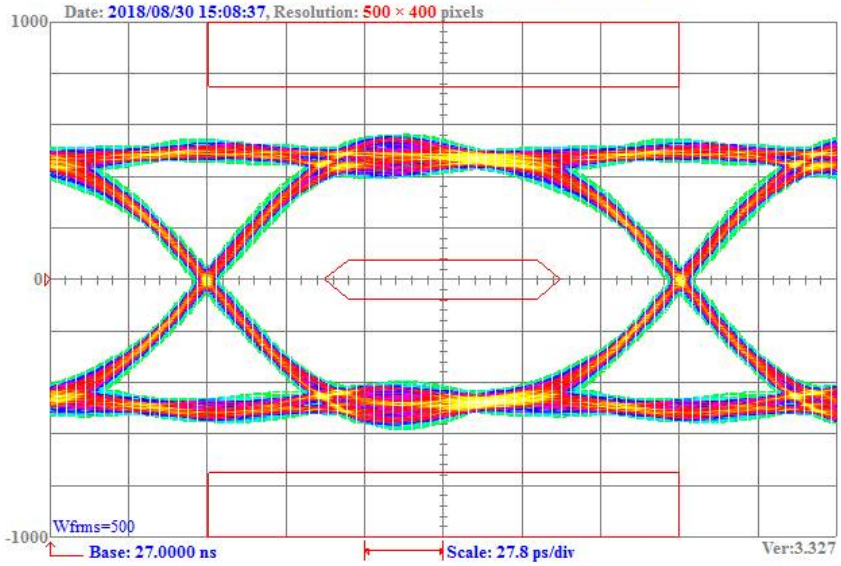
C1 -(PASS)



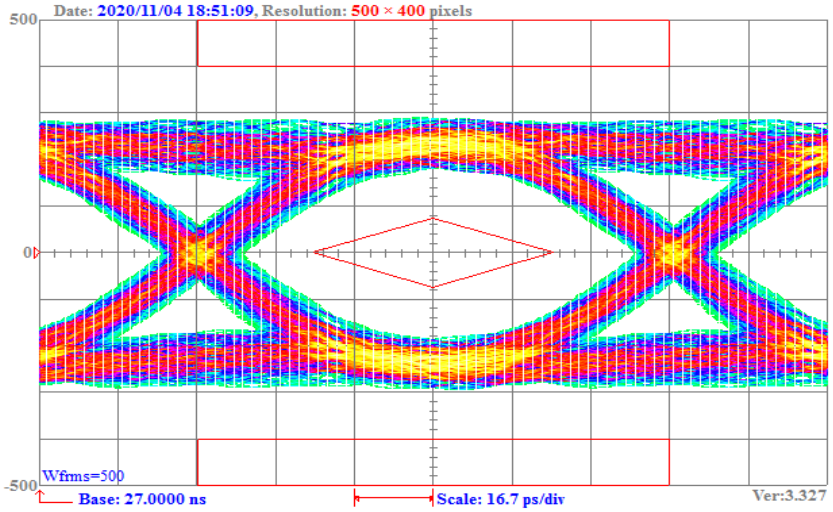
USB3.1 Choke Intra Skew Graphic result



HDMI2.0 Choke Eye Diagram with-25ps Graphic result



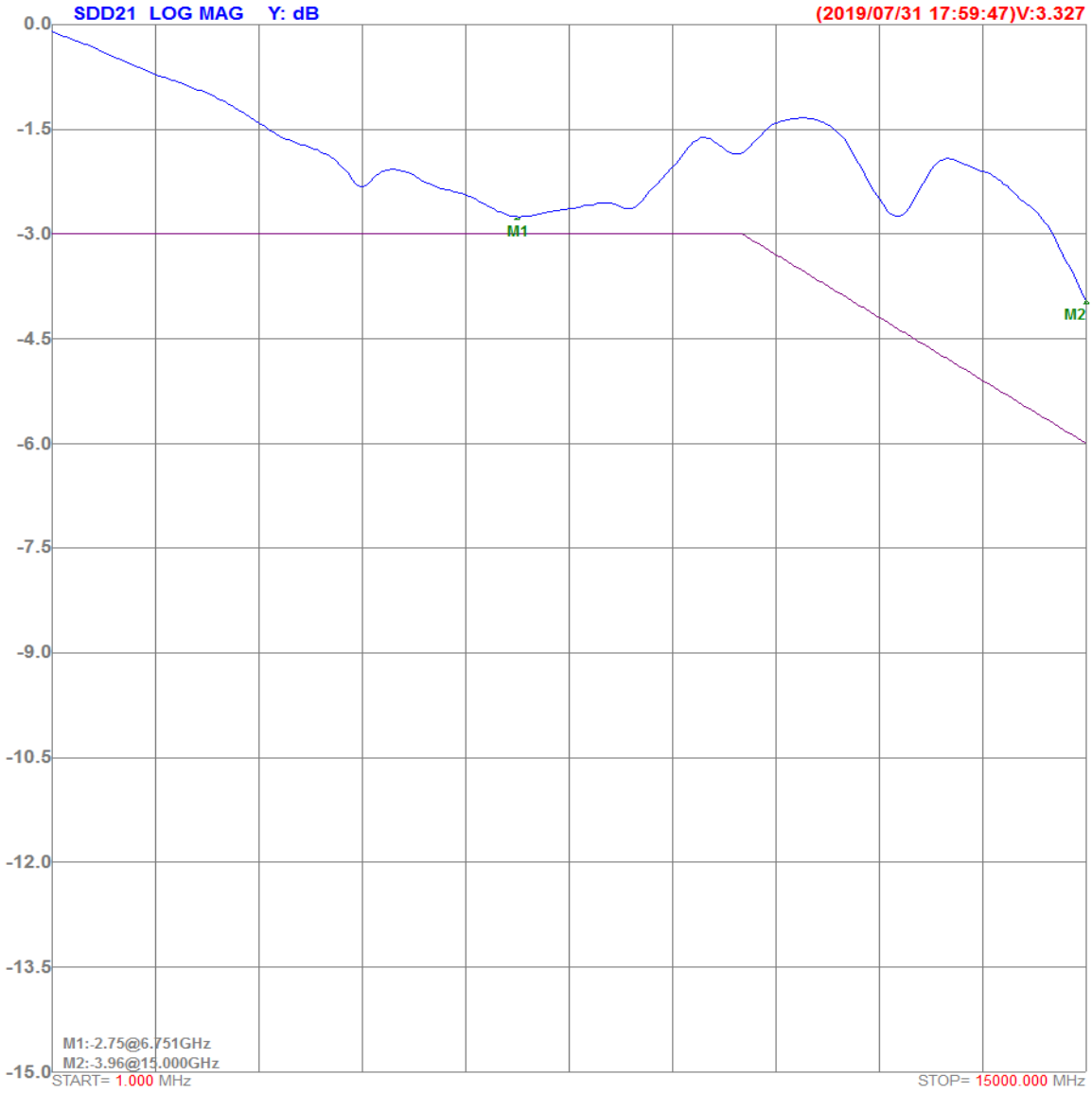
USB3.1 Choke Eye Diagram Graphic result



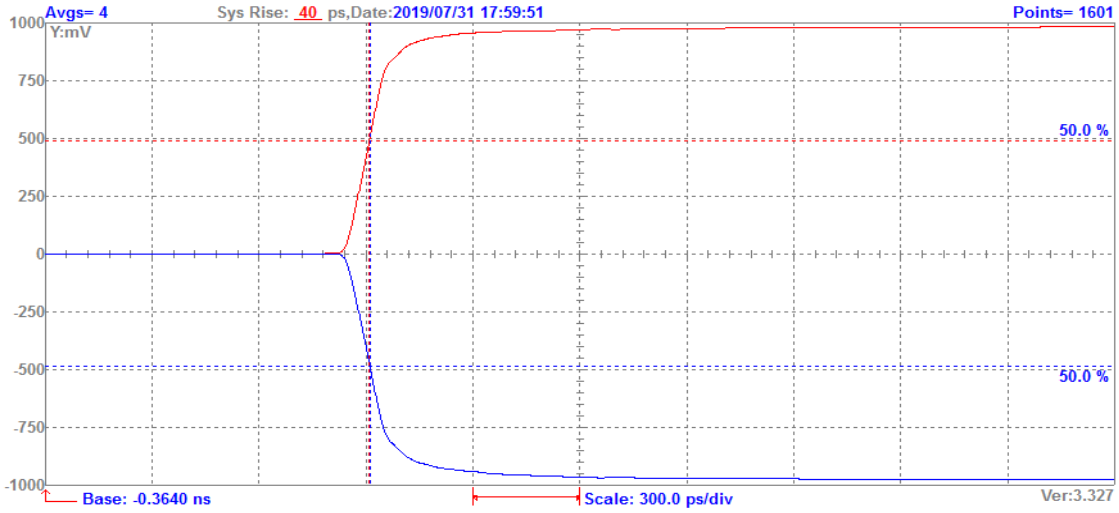
HSF2012F2SO-121T03-H

USB3.1 Choke Insertion Loss Graphic result

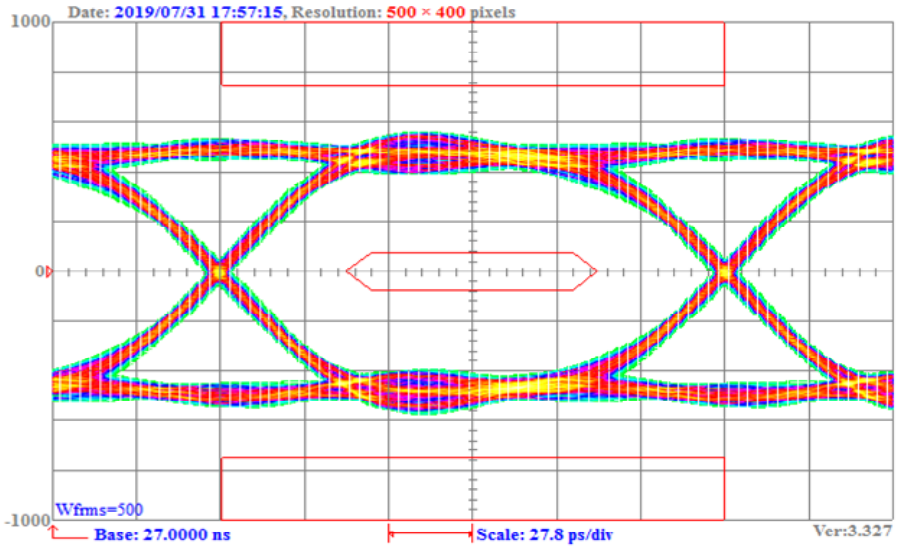
C1 -(PASS)



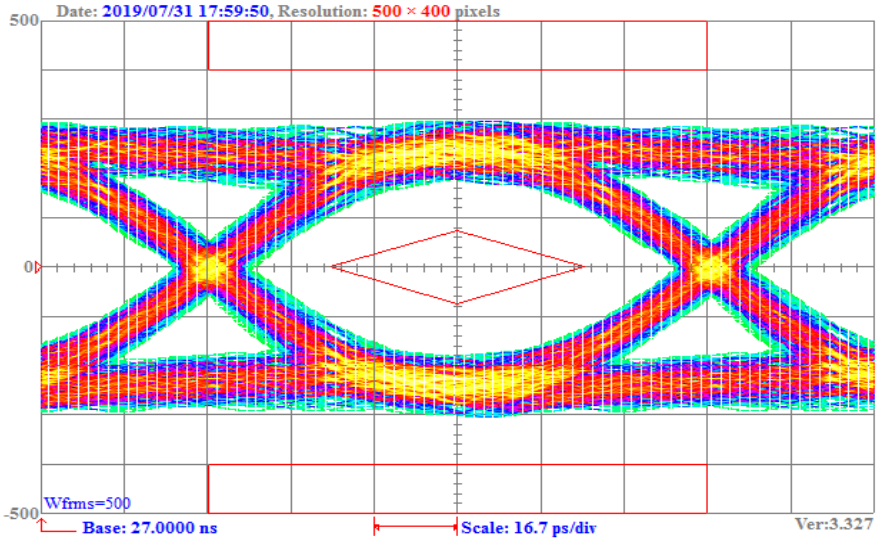
USB3.1 Choke Intra Skew Graphic result



HDMI2.0 Choke Eye Diagram with 25ps Graphic result



USB3.1 Choke Eye Diagram Graphic result



5. Recommended PC Board Pattern

	HSF2012F2S
L(mm)	2.60
H(mm)	1.40
G1(mm	1.25
G2(mm	0.45

