



PoC Sample Book —FPD-Link

TDK Corporation

Electronic Components Business Company

Magnetics Business Group

May. 20, 2026

Notice

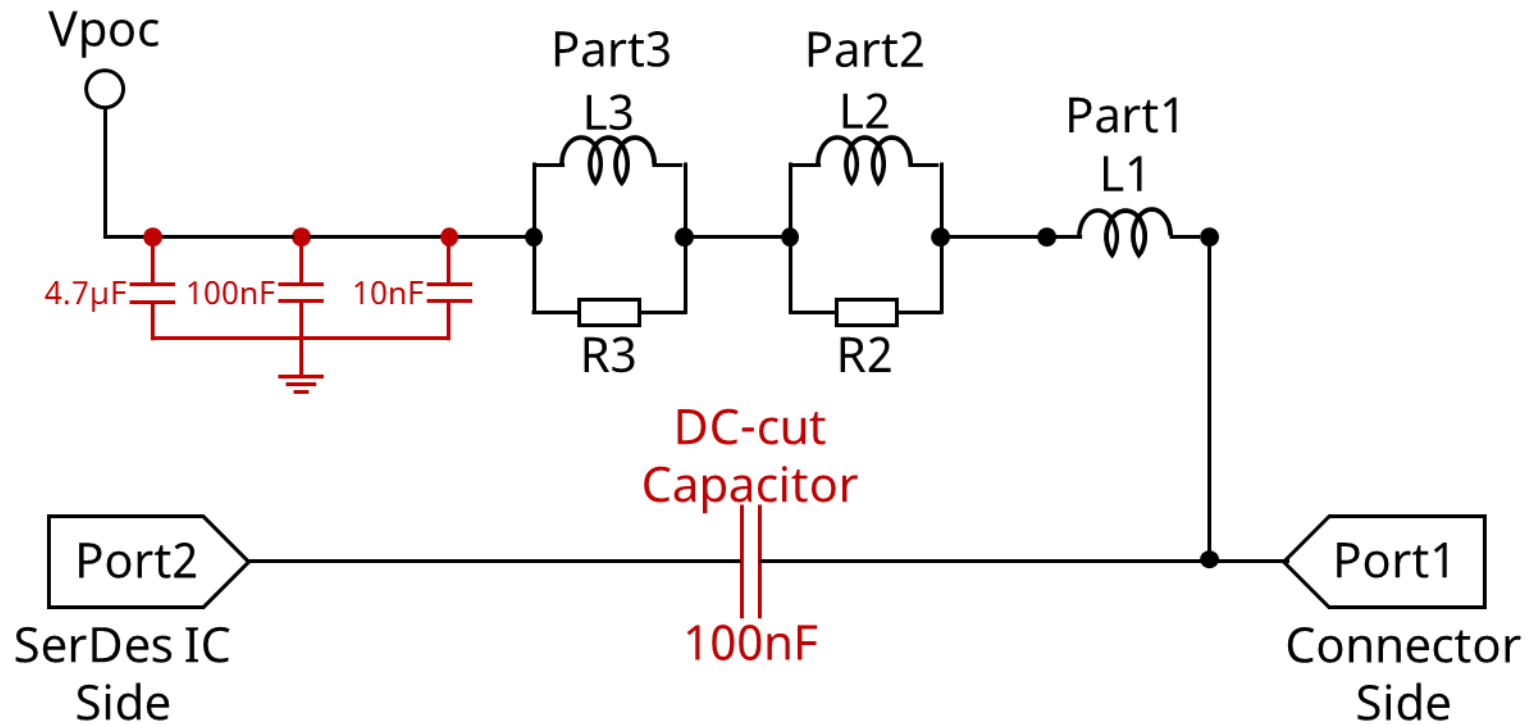
- The current values and ambient temperatures of the PoC filters described in this document are based on the specifications of each product.

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
1	FPD-Link III		1.25M~700M	200	105	ADL3225V-470MT-TL000	-	-	-	-	-	900	8.00	2.50

- Please note that the allowable current values and ambient temperatures for PoC filters may vary depending on the actual operating environment.
- Do not use the product beyond the conditions described in the datasheets attached to this sample book
- The S-parameter limit lines for FPD-Link IV are not plotted because they are not publicly available.

Layout of PoC Filter

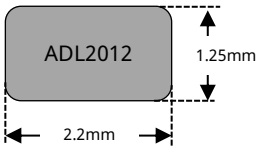
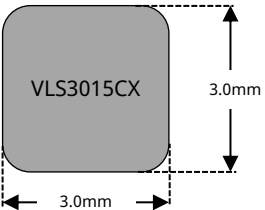
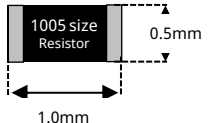
FPD-Link III & IV



Explanation of the proposal table

Example of combinations :
ADL2012-2R2M + VLS3015CX-220M-H (1.0k)

Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
1160	12.25	1.75

	ADL2012-2R2M	VLS3015CX-220M-H	1005size Resistor
Outline size	LxW (typ.) = 2.2x1.25 mm 	LxW (typ.) = 3.0x3.0 mm 	LxW (typ.) = 1.0x0.5 mm 
Rdc (Max)	500 mΩ	660 mΩ	-
Product Area (Typ)	2.2 x 1.25 = 2.75 mm ²	3.0 x 3.0 = 9.00 mm ²	1.0 x 0.5 = 0.50 mm ²
Product Height (Max)	1.75 mm	1.50 mm	-

■ Total Rdc

Sum of the Rdc Max values for each inductor.

$$500 + 660 = \underline{\underline{1160}} \text{ [mΩ]}$$

■ Product Area

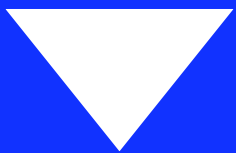
Sum of the area calculated from the product dimensions (typ value) of the inductor or resistor.

$$2.75 + 9.00 + 0.50 = \underline{\underline{12.25}} \text{ [mm}^2\text{]}$$

■ Max Height

The highest product height in the filter configuration.

$$1.75 \text{ or } 1.50 \Rightarrow \underline{\underline{1.75}} \text{ [mm]}$$



TI FPD-Link Series

FPD-Link TDK Proposed Solutions : FPD-Link Ⅲ

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
1	FPD-Link Ⅲ		1.25M~700M	200	105	ADL3225V-470MT-TL000	-	-	-	-	-	900	8.00	2.50
2	FPD-Link Ⅲ		1M~2.1G	300	105	ADL2012-4R4M-T01	-	VLS3015CX-470M-H	1.0k	-	-	2292	12.25	1.75
3	FPD-Link Ⅲ	✓	1M~2.1G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-3R3M-H	1.0k	VLS5030EX-680M-D	1.5k	1261	39.25	3.00
4	FPD-Link Ⅲ		1M~2.1G	600	105	ADL2012-2R2M-T01	-	VLS3015CZ-220M-HE	1.0k	VLS3015CZ-220M-HE	1.0k	2052	21.75	1.75
5	FPD-Link Ⅲ	✓	1M~2.1G	750/500	105/115	ADL8030VA-100M	-	VLS5030EX-680M-D	1.0k	-	-	1040	48.06	3.00
6	FPD-Link Ⅲ		1M~2.1G	800	105	ADL2012-1R5M-T01	-	ADL32VHC-100M	1.0k	VLS5030EX-330M-D	1.0k	844	38.25	3.00
7	FPD-Link Ⅲ	✓	5M~2.1G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-100M-H	1.0k	-	-	786	12.25	1.75
8	FPD-Link Ⅲ	✓	5M~2.1G	400/300	105/115	ADL3225V-220MS-TL000	-	-	-	-	-	730	8.00	2.50
9	FPD-Link Ⅲ	✓	5M~2.1G	500	105	ADL32VHC-180MF	-	-	-	-	-	890	8.00	2.50
10	FPD-Link Ⅲ	✓	5M~2.1G	500	105	ADL4524VL-180M-TL000	-	-	-	-	-	800	10.80	2.80
11	FPD-Link Ⅲ	✓	5M~2.1G	600	105	ADL2012-1R5M-T01	-	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
12	FPD-Link Ⅲ	✓	5M~2.1G	750/500	105/115	ADL8030VA-100M	-	-	-	-	-	380	21.06	2.70
13	FPD-Link Ⅲ		5M~2.1G	800	105	ADL2012-1R5M-T01	-	VLS3015CX-2R2M-H	1.0k	VLS4020CX-100M-H	1.0k	510	28.75	2.00

FPD-Link TDK Proposed Solutions : FPD-Link Ⅲ

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
14	FPD-Link Ⅲ		25M~2.1G	300	105	ADL2012-4R4M-T01	-	-	-	-	-	900	2.75	1.75
15	FPD-Link Ⅲ	✓	25M~2.1G	600/500	105/115	ADL4524VL-100M-TL000	-	-	-	-	-	600	10.80	2.80
16	FPD-Link Ⅲ		25M~2.1G	800	105	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	-	-	-	420	5.50	1.75
17	FPD-Link Ⅲ	✓	25M~2.1G	1000	105	ADL3225VM-2R2M-TL001	-	VLS3015CX-2R2M-H	1.0k	-	-	240	17.50	2.50

FPD-Link TDK Proposed Solutions : FPD-Link IV

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
18	FPD-Link IV	✓	1M~3.775G	300/200	105/115	ADL2012-2R2M-T01	2.0k	VLS3015CX-470M-H	1.0k	-	-	1892	12.75	1.75
19	FPD-Link IV	✓	1M~3.775G	350	115	MLJ1608WGCR56NTD25	-	ADL8030VA-680M	1.0k	-	-	2390	22.84	2.70
20	FPD-Link IV	✓	1M~3.775G	400/200	105/115	ADL2012-2R2M-T01	2.0k	VLS5045EX-101M-H	1.0k	-	-	1254	30.25	4.50
21	FPD-Link IV	✓	1M~3.775G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-3R3M-H	1.0k	VLS5030EX-680M-D	1.5k	1261	39.25	3.00
22	FPD-Link IV	✓	1M~3.775G	500	105	MLJ1608WGCR56NTD25	-	ADL32VHC-100M	1.0k	VLS5030EX-680M-D	1.5k	1670	36.78	3.00
23	FPD-Link IV	✓	1M~3.775G	750	105	ADL2012-R47M-T01	-	ADL32VHC-100M	1.0k	VLS5030EX-680M-D	1.5k	1070	38.25	3.00
24	FPD-Link IV	✓	1M~3.775G	750/500	105/115	ADL8030VA-100M	-	VLS5030EX-680M-D	1.0k	-	-	1040	48.06	3.00
25	FPD-Link IV	✓	4.71875M ~3.775G	300/200	105/115	ADL2012-2R2M-T01	-	ADL3225VT-100M-TL000	1.2k	-	-	650	11.25	2.50
26	FPD-Link IV	✓	4.71875M ~3.775G	300	115	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	-	ADL3225VT-100M-TL000	1.2k	570	14.00	2.50
27	FPD-Link IV		4.71875M ~3.775G	300	105	MLJ1005WGHR47PTD25	-	ADL3225V-470MT-TL000	1.0k	-	-	2050	9.00	2.50
28	FPD-Link IV		4.71875M ~3.775G	350	105	MLJ1608WGC1R2MTD25	-	VLS3015CZ-220M-HE	1.0k	-	-	1976	10.78	1.50
29	FPD-Link IV	✓	4.71875M ~3.775G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-100M-H	1.0k	-	-	786	12.25	1.75
30	FPD-Link IV		4.71875M ~3.775G	400	105	MLJ1005WGHR36PTD25	-	MLZ1608CDCR47MTD25	1.0k	VLS3015CZ-220M-HE	1.0k	2182	11.78	1.50

FPD-Link TDK Proposed Solutions : FPD-Link IV

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
31	FPD-Link IV	✓	4.71875M ~3.775G	400/300	105/115	ADL3225V-220MS-TL000	-	-	-	-	-	730	8.00	2.50
32	FPD-Link IV	✓	4.71875M ~3.775G	500/400	105/115	MLJ1608WGCR56NTD25	-	ADL32VHC-150M	1.5k	-	-	1330	9.78	2.50
33	FPD-Link IV		4.71875M ~3.775G	500	105	MLJ1608WGCR56NTD25	-	VLS3015CZ-220M-HE	1.0k	-	-	1476	10.78	1.50
34	FPD-Link IV	✓	4.71875M ~3.775G	500	105	ADL32VHC-180MF	-	-	-	-	-	890	8.00	2.50
35	FPD-Link IV	✓	4.71875M ~3.775G	500	105	ADL4524VL-180M-TL000	-	-	-	-	-	800	10.80	2.80
36	FPD-Link IV	✓	4.71875M ~3.775G	600	105	ADL2012-1R5M-T01	-	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
37	FPD-Link IV	✓	4.71875M ~3.775G	600	125	ADL3225VM-2R2M-TL001	-	ADM32FSC-100M	1.0k	-	-	600	16.50	2.50
38	FPD-Link IV	✓	4.71875M ~3.775G	600/300	105/115	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	1.5k	ADM32FSC-100M	1.5k	840	14.50	2.50
39	FPD-Link IV		4.71875M ~3.775G	700	105	ADL2012-1R5M-T01	-	ADL32VHC-100M	1.0k	-	-	520	11.25	2.50
40	FPD-Link IV	✓	4.71875M ~3.775G	750/500	105/115	ADL8030VA-100M	-	-	-	-	-	380	21.06	2.70

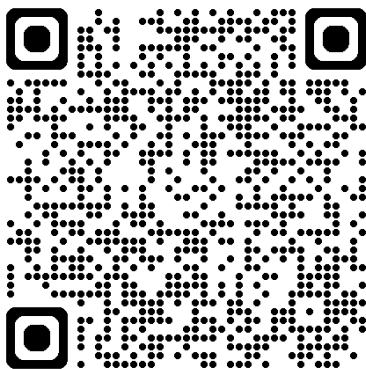
FPD-Link TDK Proposed Solutions : FPD-Link IV

Reference approval granted

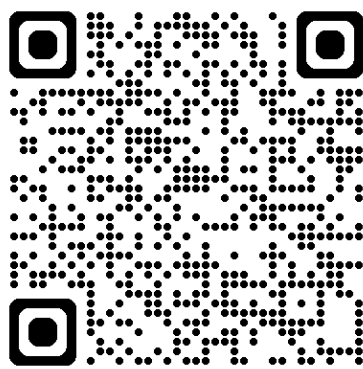
No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
41	FPD-Link IV		4.71875M ~3.775G	800	105	ADL2012-R47M-T01	-	ADL4532VK-160M-TL000	1.0k	-	-	570	17.65	3.40
42	FPD-Link IV		4.71875M ~3.775G	800	105	ADL2012-1R5M-T01	-	VLS4020CX-100M-H	1.0k	-	-	450	19.25	2.00
43	FPD-Link IV	✓	4.71875M ~3.775G	1000	105	ADL2012-R80M-T01	-	TFM201210ALMA1R5MTAA	1.0k	VLS5030EX-150M-D	1.5k	394	32.75	3.00
44	FPD-Link IV	✓	4.71875M ~3.775G	1000/900	115/125	ADL3225VM-2R2M-TL001	-	ADL3225VM-2R2M-TL001	1.5k	ADM45FDC-100M	1.5k	620	31.40	3.00
45	FPD-Link IV		23.59375M ~3.775G	300	105	ADL2012-4R4M-T01	-	-	-	-	-	900	2.75	1.75
46	FPD-Link IV	✓	23.59375M ~3.775G	600/500	105/115	ADL4524VL-100M-TL000	-	-	-	-	-	600	10.80	2.80
47	FPD-Link IV		23.59375M ~3.775G	800	105	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	-	-	-	420	5.50	1.75
48	FPD-Link IV	✓	23.59375M ~3.775G	1000	105	ADL2012-R47M-T01	-	ADL4532VK-100M-TL000	1.0k	-	-	335	17.65	3.40
49	FPD-Link IV	✓	23.59375M ~3.775G	1000	105	ADL3225VM-2R2M-TL001	-	VLS3015CX-2R2M-H	1.0k	-	-	240	17.50	2.50

Related Information

TDK Web Pages and Articles

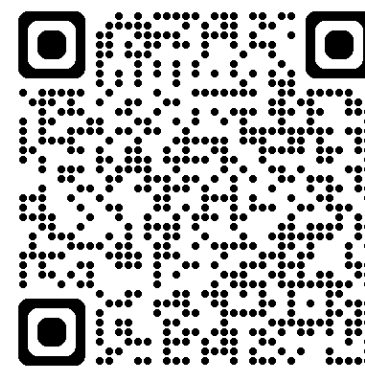


TDK Product
Catalog:
Automotive Grade,
for PoC

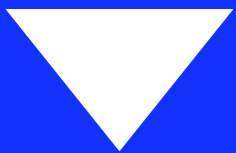


Tech Library Article:
Automotive SerDes (LVDS) video
transmission using coaxial
cable: inductors and chip beads
for PoC filters

Technical Support Tool



PoC (Power over Coax)
Selection Tool
Filter selection tool for PoC
method of superimposing
power supply to signal line
serializer/deserializer single-
ended communication.

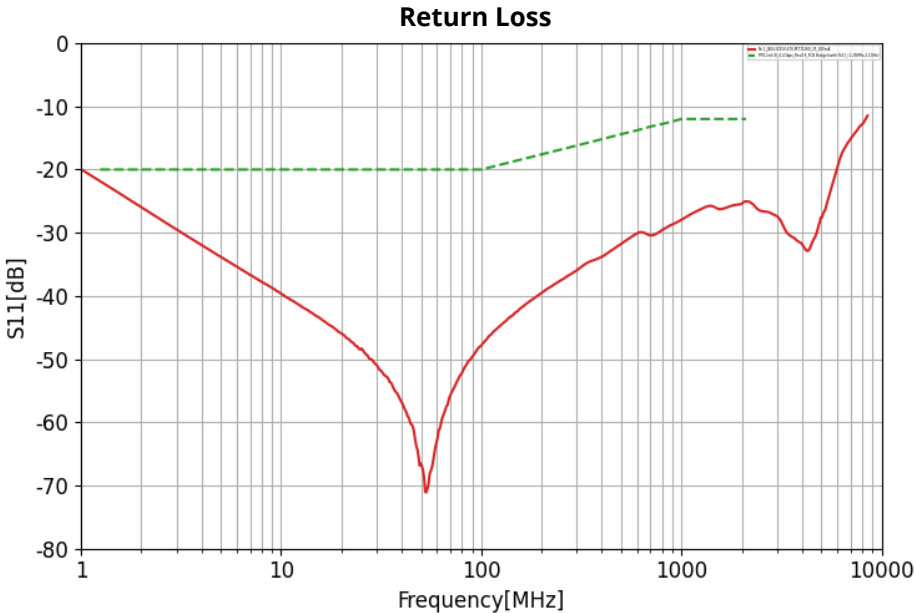
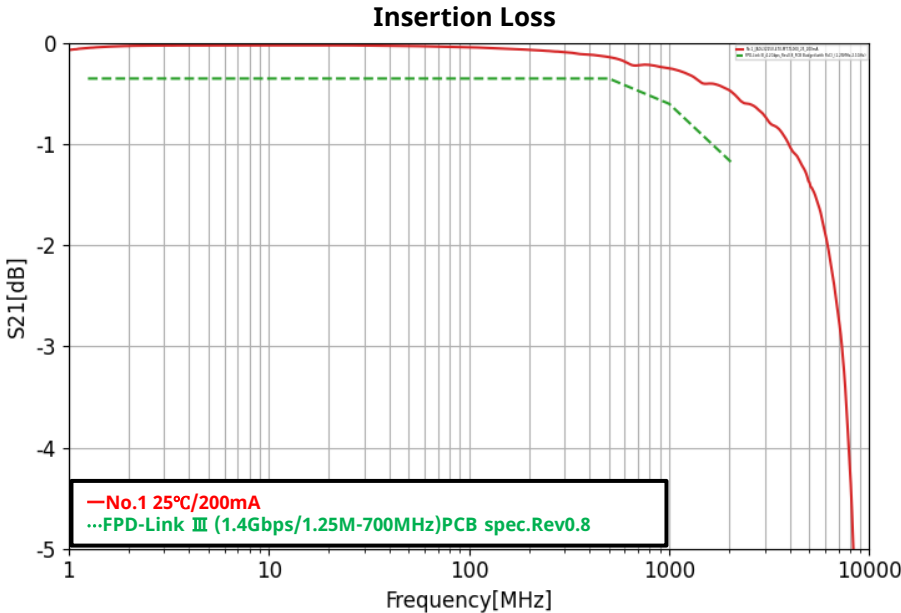


Filter Information

FPD-Link III : 200mA(1.25M~700MHz)

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
1	FPD-Link III		1.25M~700M	200	105	ADL3225V-470MT-TL000	-	-	-	-	-	900	8.00	2.50

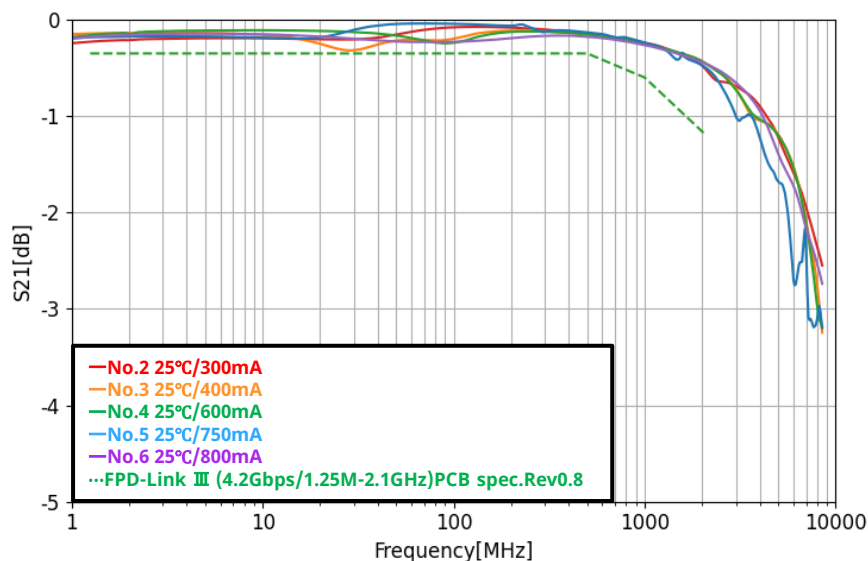


FPD-Link III : 300mA~800mA(1M~2.1GHz)

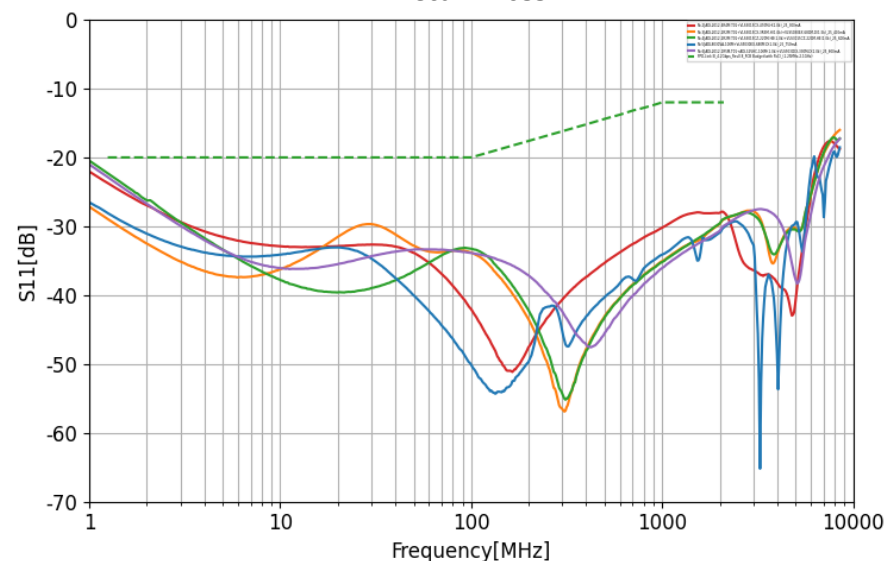
Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
2	FPD-Link III		1M~2.1G	300	105	ADL2012-4R4M-T01	-	VLS3015CX-470M-H	1.0k	-	-	2292	12.25	1.75
3	FPD-Link III	✓	1M~2.1G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-3R3M-H	1.0k	VLS5030EX-680M-D	1.5k	1261	39.25	3.00
4	FPD-Link III		1M~2.1G	600	105	ADL2012-2R2M-T01	-	VLS3015CZ-220M-HE	1.0k	VLS3015CZ-220M-HE	1.0k	2052	21.75	1.75
5	FPD-Link III	✓	1M~2.1G	750/500	105/115	ADL8030VA-100M	-	VLS5030EX-680M-D	1.0k	-	-	1040	48.06	3.00
6	FPD-Link III		1M~2.1G	800	105	ADL2012-1R5M-T01	-	ADL32VHC-100M	1.0k	VLS5030EX-330M-D	1.0k	844	38.25	3.00

Insertion Loss



Return Loss

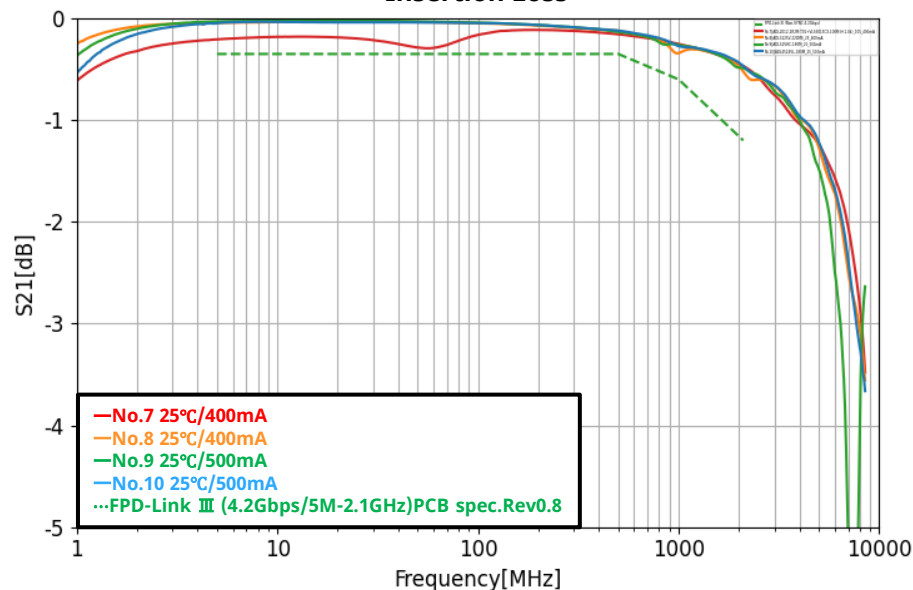


FPD-Link III : 400mA~500mA(5M~2.1GHz)

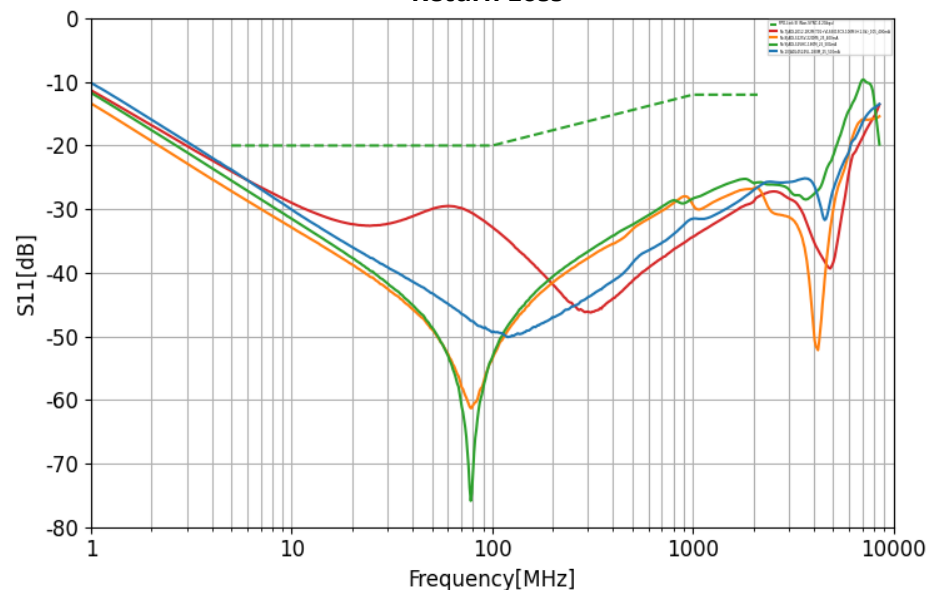
Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
7	FPD-Link III	✓	5M~2.1G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-100M-H	1.0k	-	-	786	12.25	1.75
8	FPD-Link III	✓	5M~2.1G	400/300	105/115	ADL3225V-220MS-TL000	-	-	-	-	-	730	8.00	2.50
9	FPD-Link III	✓	5M~2.1G	500	105	ADL32VHC-180MF	-	-	-	-	-	890	8.00	2.50
10	FPD-Link III	✓	5M~2.1G	500	105	ADL4524VL-180M-TL000	-	-	-	-	-	800	10.80	2.80

Insertion Loss



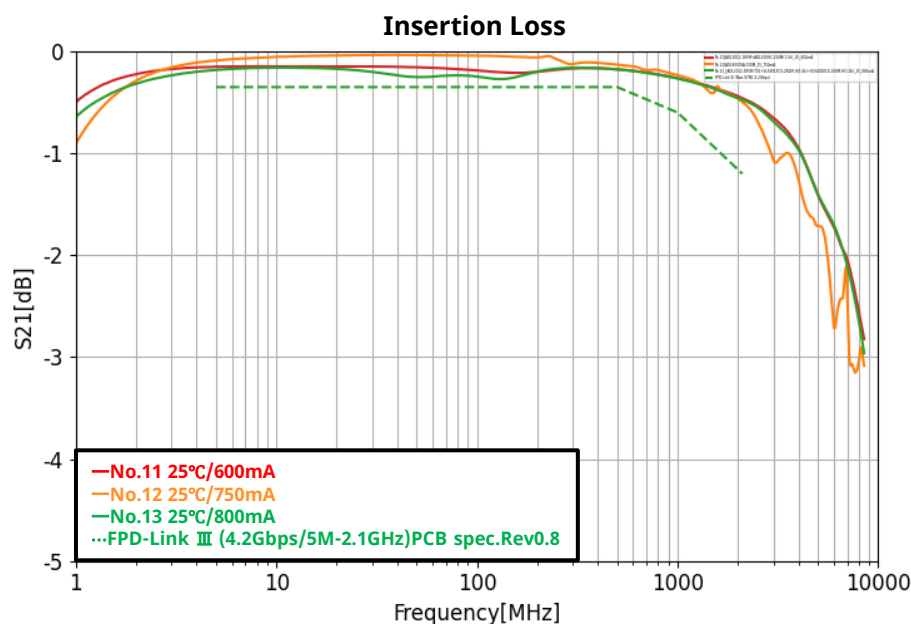
Return Loss



FPD-Link III : 600mA~800mA(5M~2.1GHz)

Reference approval granted

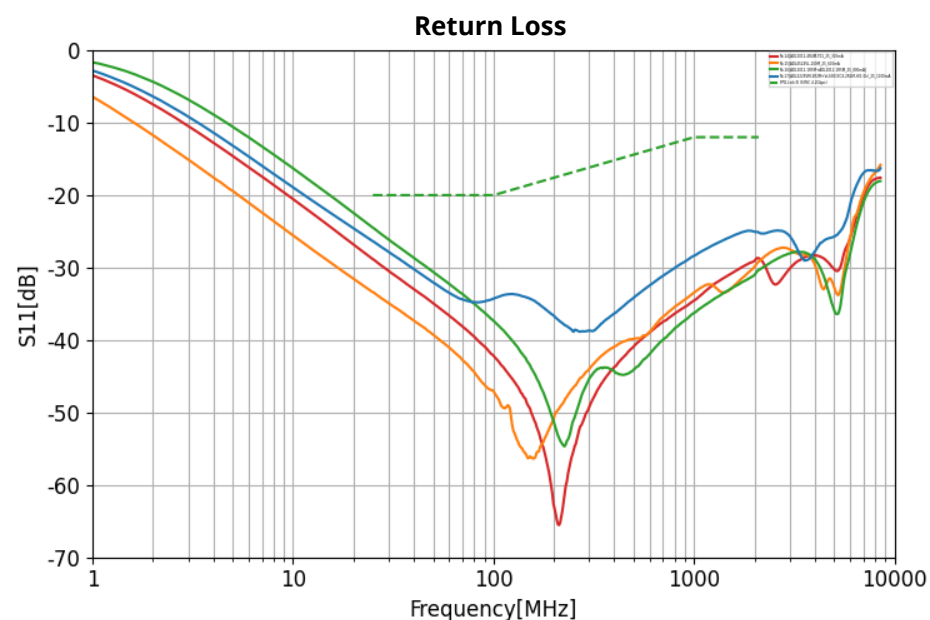
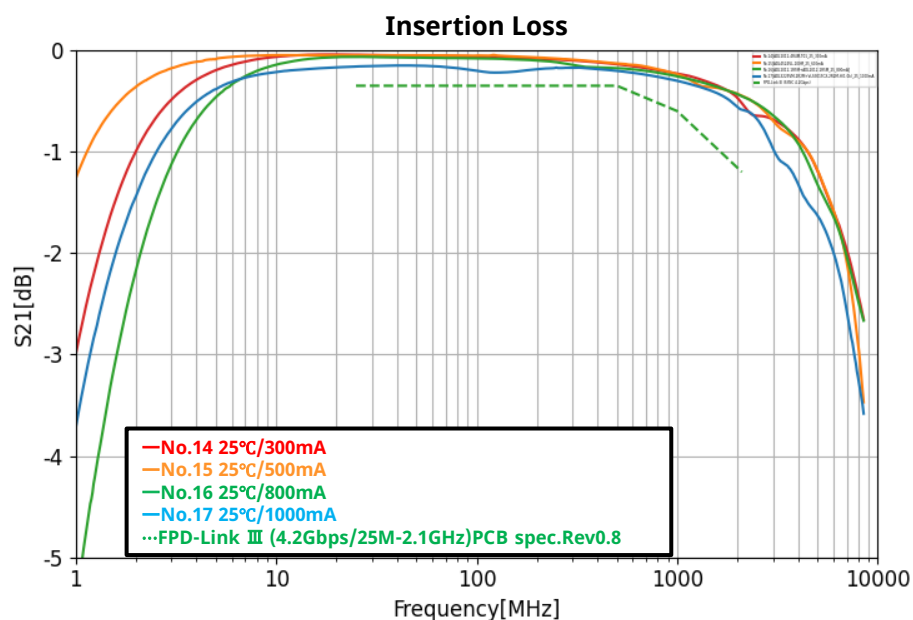
No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
11	FPD-Link III	✓	5M~2.1G	600	105	ADL2012-1R5M-T01	-	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
12	FPD-Link III	✓	5M~2.1G	750/500	105/115	ADL8030VA-100M	-	-	-	-	-	380	21.06	2.70
13	FPD-Link III		5M~2.1G	800	105	ADL2012-1R5M-T01	-	VLS3015CX-2R2M-H	1.0k	VLS4020CX-100M-H	1.0k	510	28.75	2.00



FPD-Link III : 300mA~1000mA(25M~2.1GHz)

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
14	FPD-Link III		25M~2.1G	300	105	ADL2012-4R4M-T01	-	-	-	-	-	900	2.75	1.75
15	FPD-Link III	✓	25M~2.1G	600/500	105/115	ADL4524VL-100M-TL000	-	-	-	-	-	600	10.80	2.80
16	FPD-Link III		25M~2.1G	800	105	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	-	-	-	420	5.50	1.75
17	FPD-Link III	✓	25M~2.1G	1000	105	ADL3225VM-2R2M-TL001	-	VLS3015CX-2R2M-H	1.0k	-	-	240	17.50	2.50

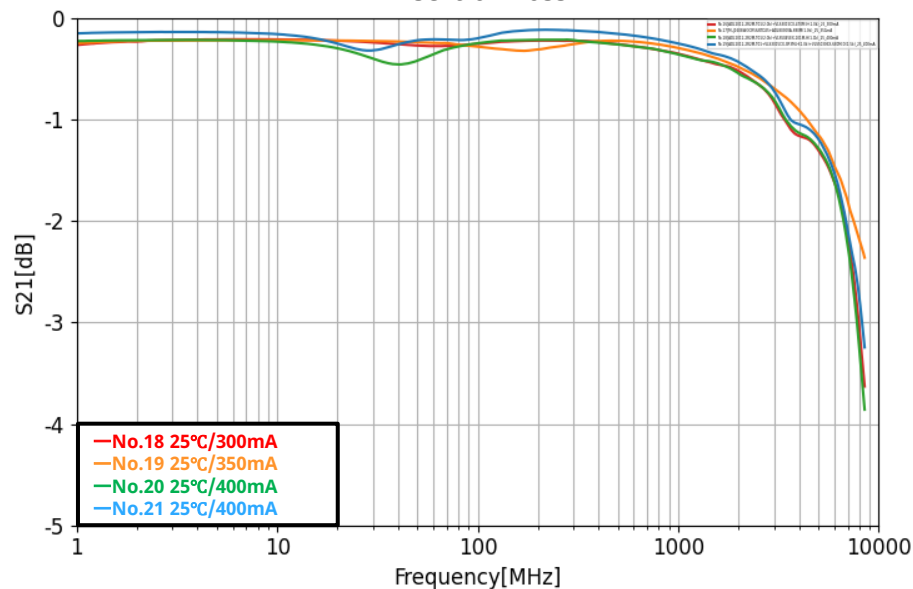


FPD-Link IV : 300mA~400mA(1M~3.775GHz)

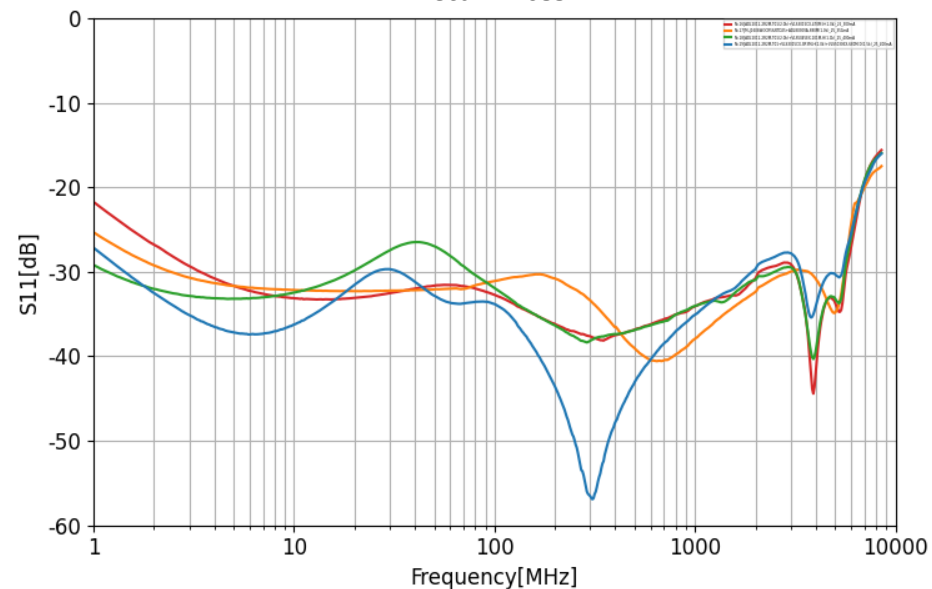
Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
18	FPD-Link IV	✓	1M~3.775G	300/200	105/115	ADL2012-2R2M-T01	2.0k	VLS3015CX-470M-H	1.0k	-	-	1892	12.75	1.75
19	FPD-Link IV	✓	1M~3.775G	350	115	MLJ1608WGCR56NTD25	-	ADL8030VA-680M	1.0k	-	-	2390	22.84	2.70
20	FPD-Link IV	✓	1M~3.775G	400/200	105/115	ADL2012-2R2M-T01	2.0k	VLS5045EX-101M-H	1.0k	-	-	1254	30.25	4.50
21	FPD-Link IV	✓	1M~3.775G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-3R3M-H	1.0k	VLS5030EX-680M-D	1.5k	1261	39.25	3.00

Insertion Loss



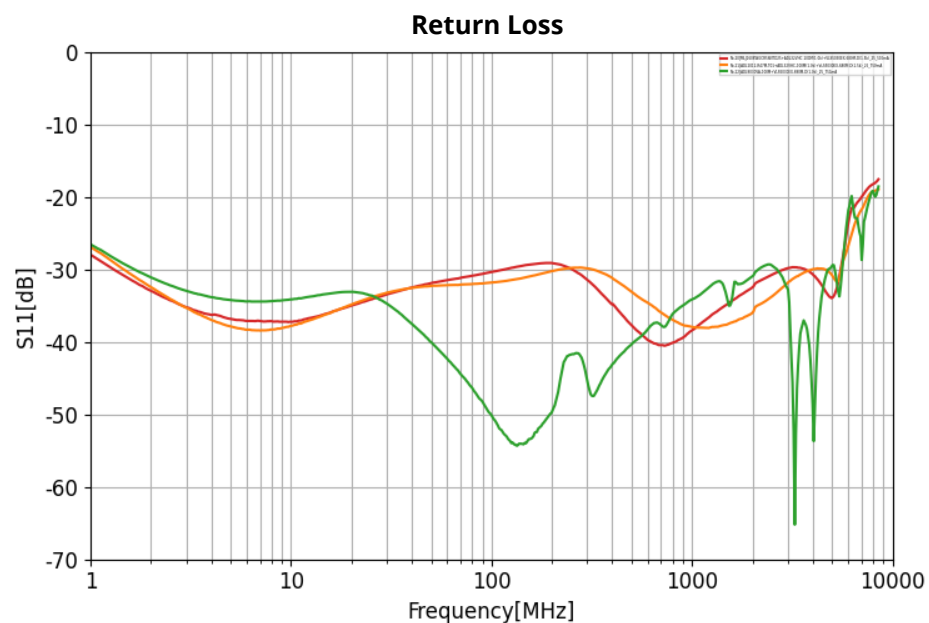
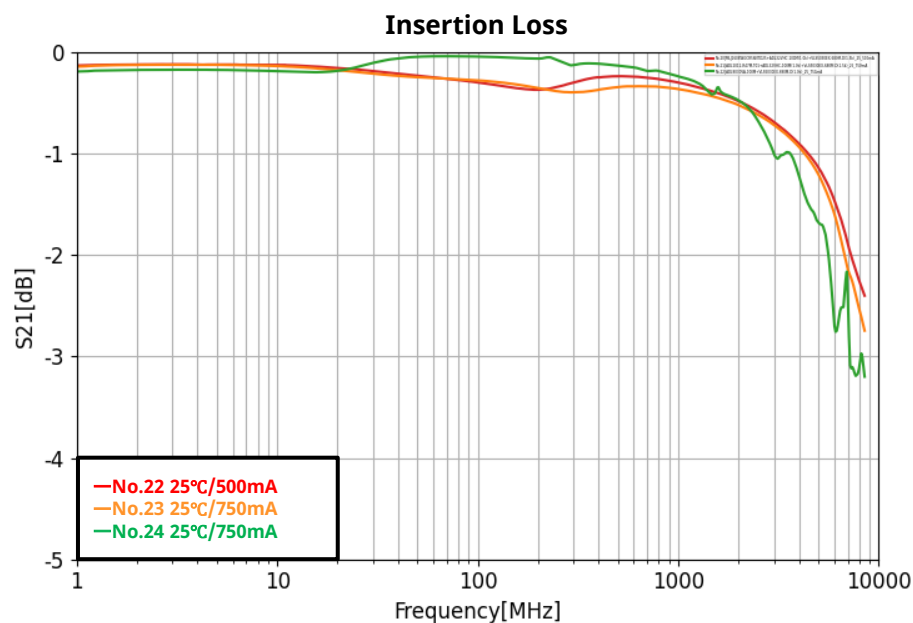
Return Loss



FPD-Link IV : 500mA~750mA(1M~3.775GHz)

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
22	FPD-Link IV	✓	1M~3.775G	500	105	MLJ1608WGCR56NTD25	-	ADL32VHC-100M	1.0k	VLS5030EX-680M-D	1.5k	1670	36.78	3.00
23	FPD-Link IV	✓	1M~3.775G	750	105	ADL2012-R47M-T01	-	ADL32VHC-100M	1.0k	VLS5030EX-680M-D	1.5k	1070	38.25	3.00
24	FPD-Link IV	✓	1M~3.775G	750/500	105/115	ADL8030VA-100M	-	VLS5030EX-680M-D	1.0k	-	-	1040	48.06	3.00

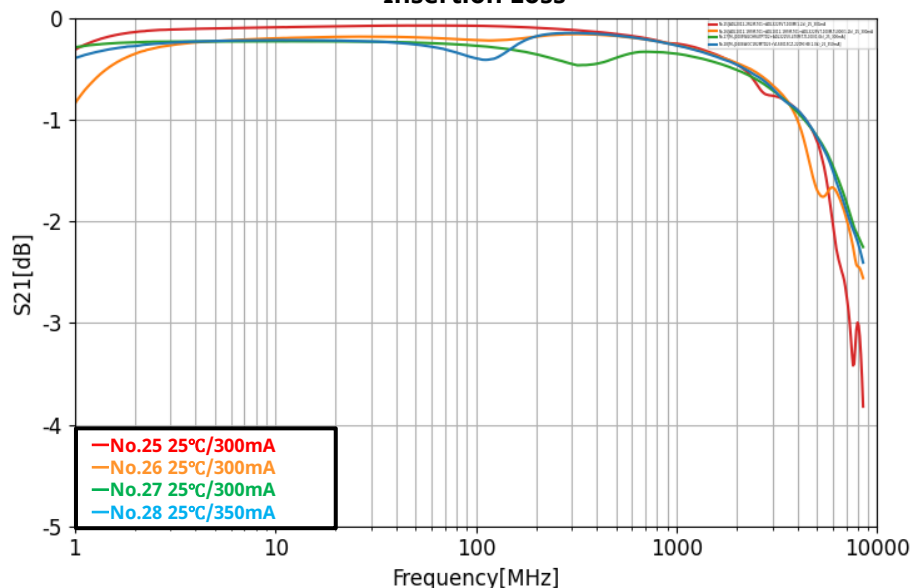


FPD-Link IV : 300mA (4.71875M~3.775GHz)

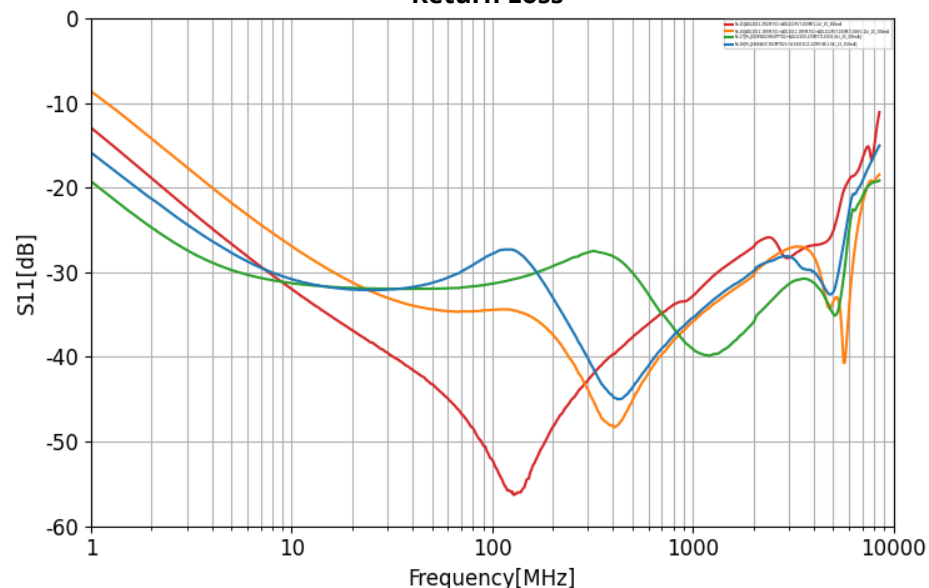
Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
25	FPD-Link IV	✓	4.71875M~3.775G	300/200	105/115	ADL2012-2R2M-T01	-	ADL3225VT-100M-TL000	1.2k	-	-	650	11.25	2.50
26	FPD-Link IV	✓	4.71875M~3.775G	300	115	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	-	ADL3225VT-100M-TL000	1.2k	570	14.00	2.50
27	FPD-Link IV		4.71875M~3.775G	300	105	MLJ1005WGH47PTD25	-	ADL3225V-470MT-TL000	1.0k	-	-	2050	9.00	2.50
28	FPD-Link IV		4.71875M~3.775G	350	105	MLJ1608WGC1R2MTD25	-	VLS3015CZ-220M-HE	1.0k	-	-	1976	10.78	1.50

Insertion Loss



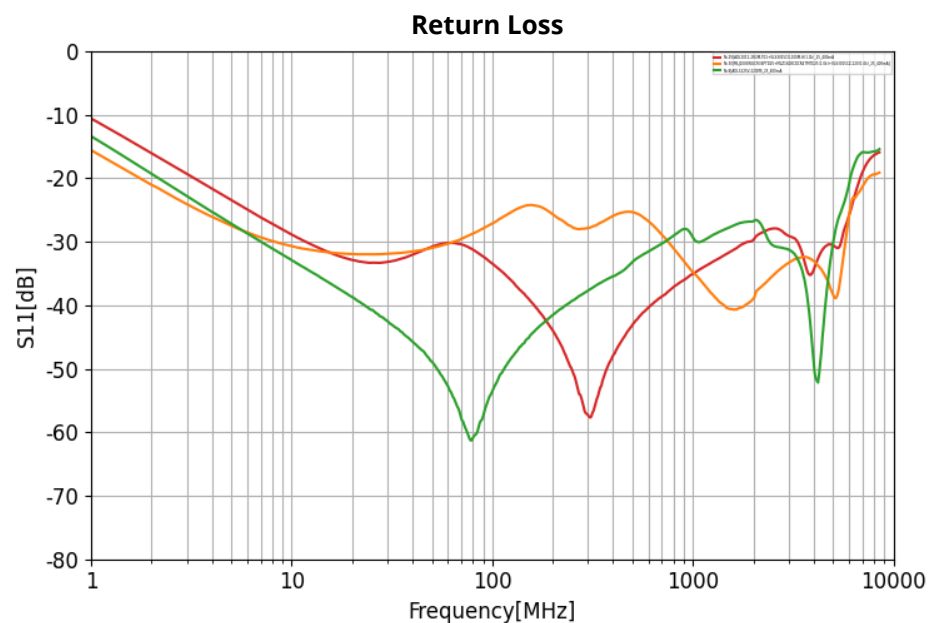
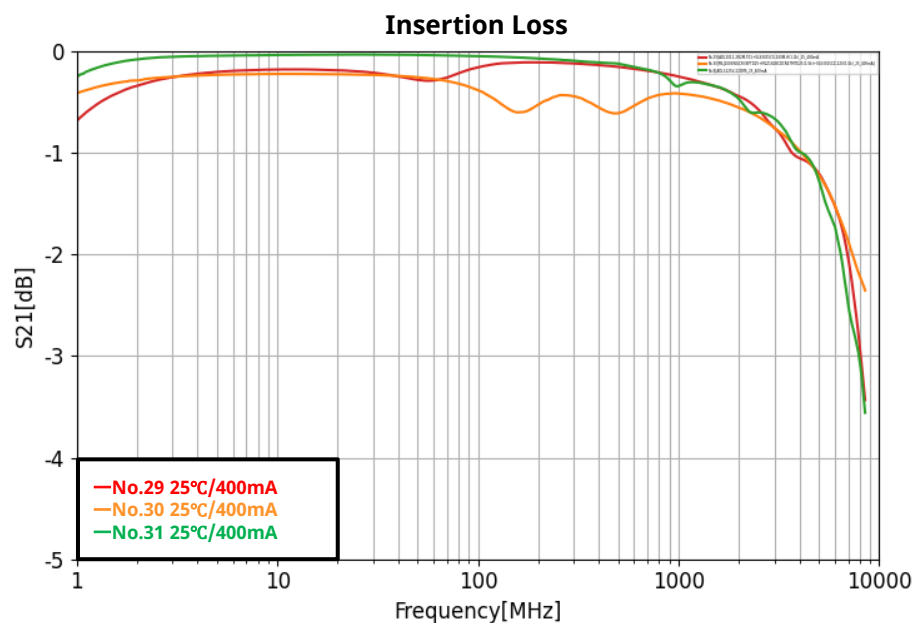
Return Loss



FPD-Link IV : 400mA(4.71875M~3.775GHz)

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
29	FPD-Link IV	✓	4.71875M~3.775G	400	105	ADL2012-2R2M-T01	-	VLS3015CX-100M-H	1.0k	-	-	786	12.25	1.75
30	FPD-Link IV		4.71875M~3.775G	400	105	MLJ1005WGHR36PTD25	-	MLZ1608CDCR47MTD25	1.0k	VLS3015CZ-220M-HE	1.0k	2182	11.78	1.50
31	FPD-Link IV	✓	4.71875M~3.775G	400/300	105/115	ADL3225V-220MS-TL000	-	-	-	-	-	730	8.00	2.50

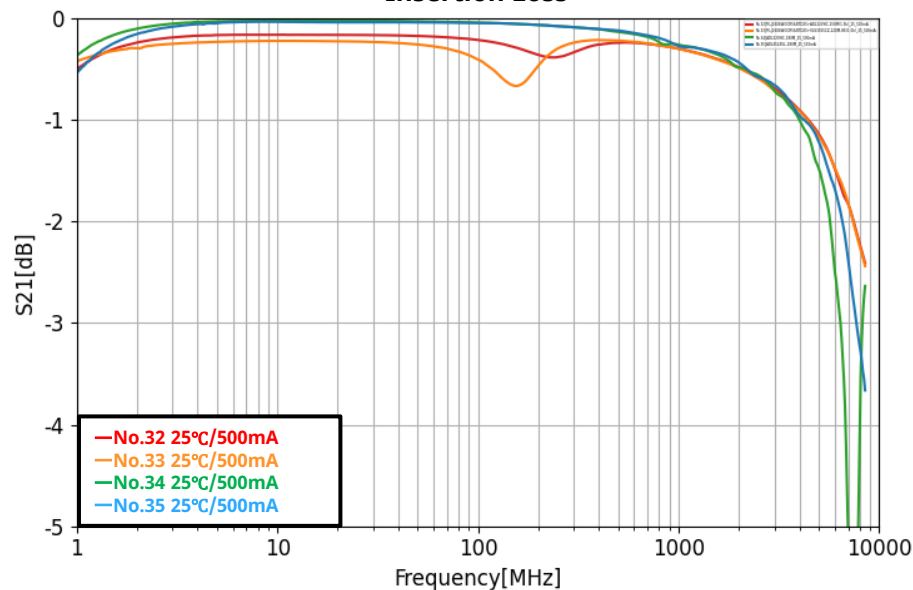


FPD-Link IV : 500mA (4.71875M~3.775GHz)

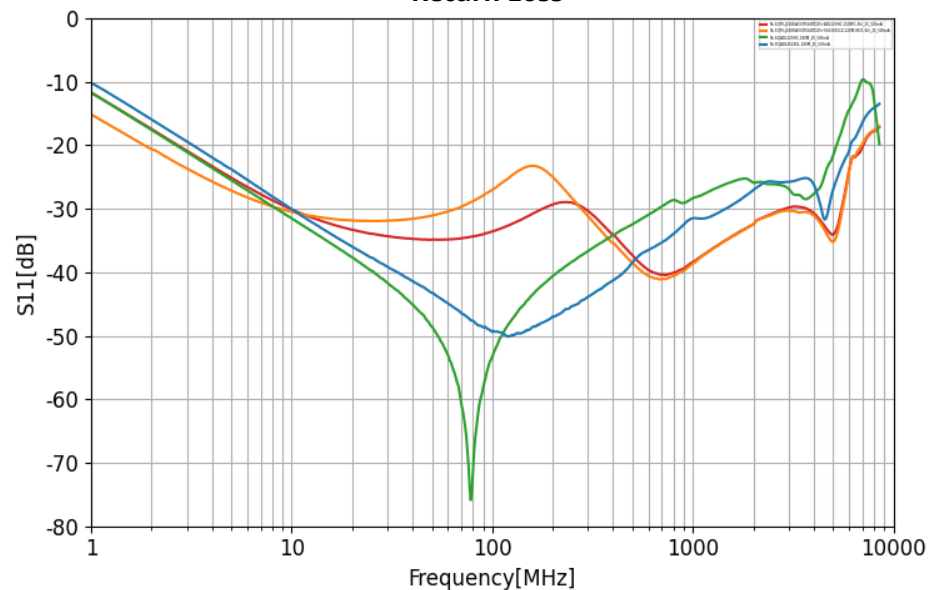
Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
32	FPD-Link IV	✓	4.71875M~3.775G	500/400	105/115	MLJ1608WGCR56NTD25	-	ADL32VHC-150M	1.5k	-	-	1330	9.78	2.50
33	FPD-Link IV		4.71875M~3.775G	500	105	MLJ1608WGCR56NTD25	-	VLS3015CZ-220M-HE	1.0k	-	-	1476	10.78	1.50
34	FPD-Link IV	✓	4.71875M~3.775G	500	105	ADL32VHC-180MF	-	-	-	-	-	890	8.00	2.50
35	FPD-Link IV	✓	4.71875M~3.775G	500	105	ADL4524VL-180M-TL000	-	-	-	-	-	800	10.80	2.80

Insertion Loss



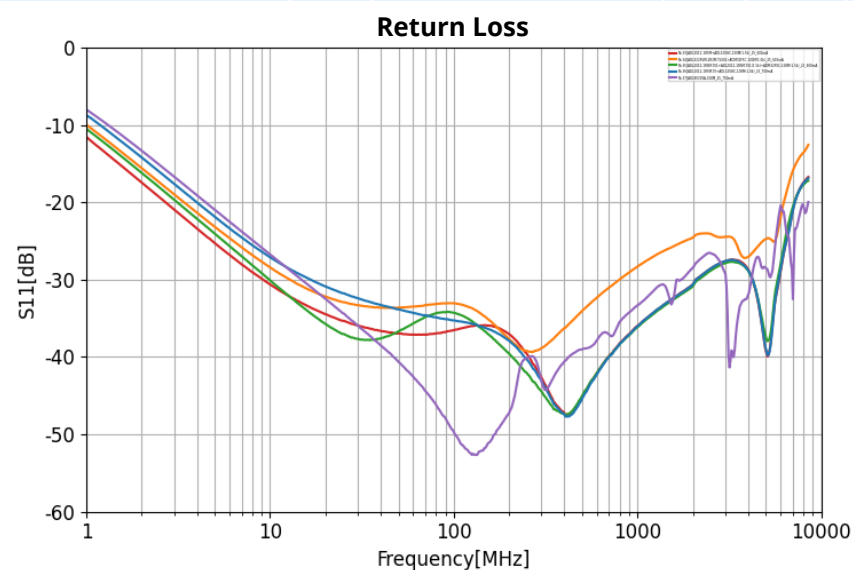
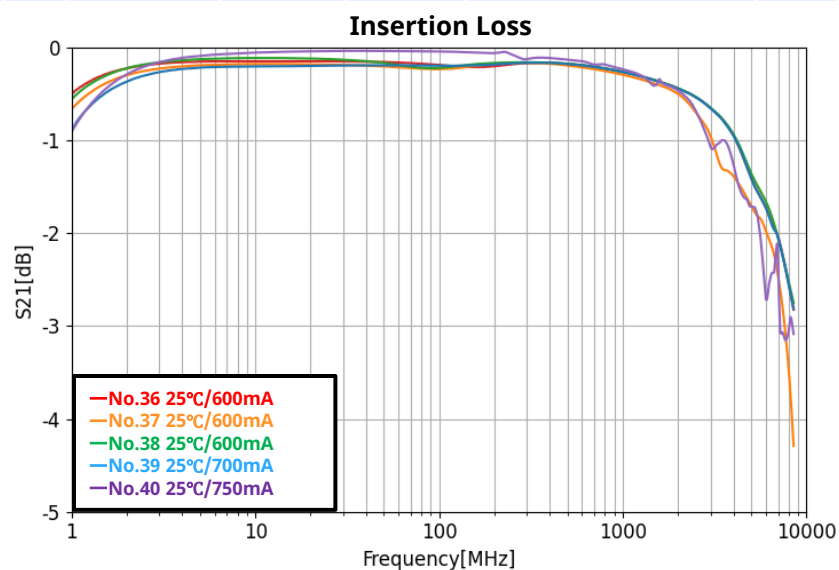
Return Loss



FPD-Link IV : 600mA~750mA(4.71875M~3.775GHz)

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
36	FPD-Link IV	✓	4.71875M~3.775G	600	105	ADL2012-1R5M-T01	-	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
37	FPD-Link IV	✓	4.71875M~3.775G	600	125	ADL3225VM-2R2M-TL001	-	ADM32FSC-100M	1.0k	-	-	600	16.50	2.50
38	FPD-Link IV	✓	4.71875M~3.775G	600/300	105/115	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	1.5k	ADM32FSC-100M	1.5k	840	14.50	2.50
39	FPD-Link IV		4.71875M~3.775G	700	105	ADL2012-1R5M-T01	-	ADL32VHC-100M	1.0k	-	-	520	11.25	2.50
40	FPD-Link IV	✓	4.71875M~3.775G	750/500	105/115	ADL8030VA-100M	-	-	-	-	-	380	21.06	2.70

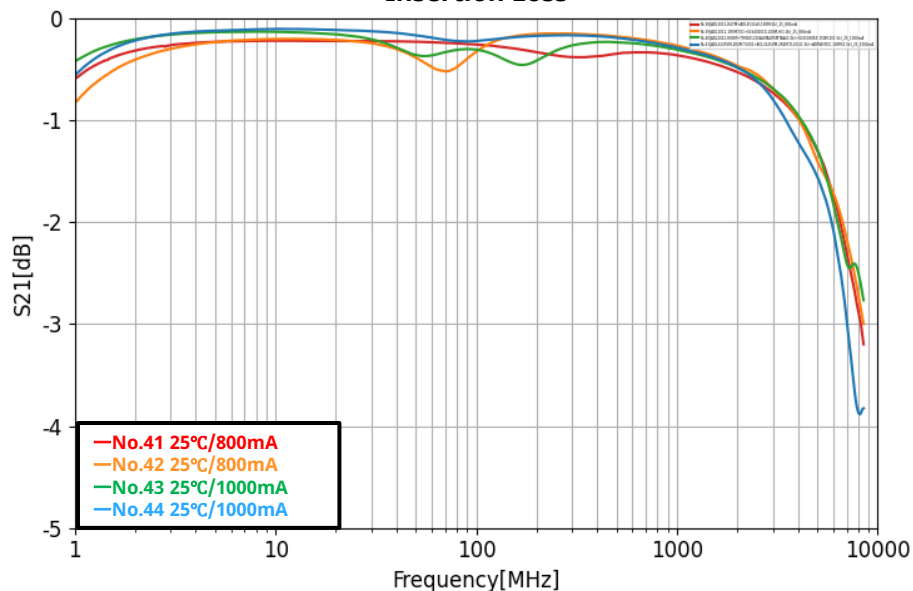


FPD-Link IV : 800mA~1000mA(4.71875M~3.775GHz)

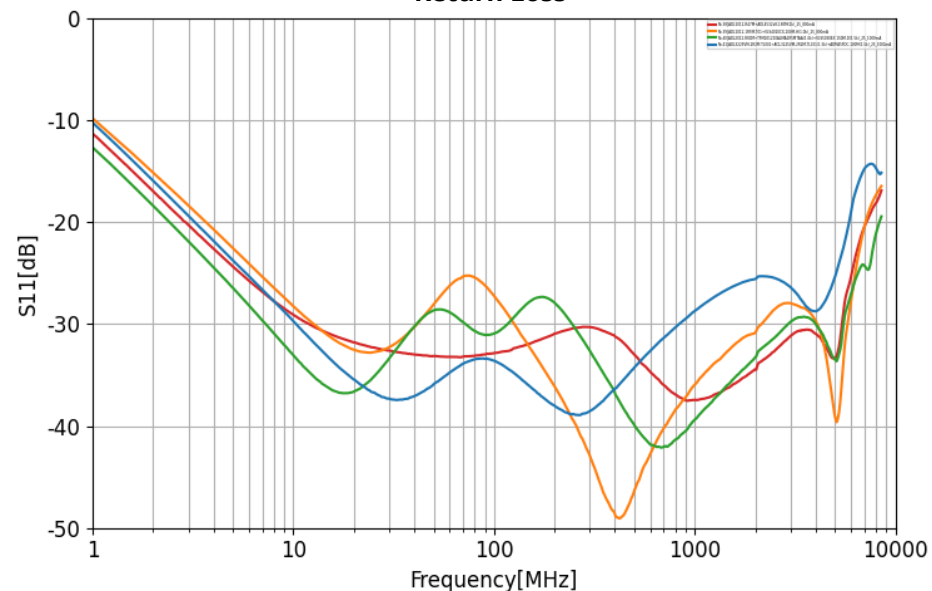
Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
41	FPD-Link IV		4.71875M~3.775G	800	105	ADL2012-R47M-T01	-	ADL4532VK-160M-TL000	1.0k	-	-	570	17.65	3.40
42	FPD-Link IV		4.71875M~3.775G	800	105	ADL2012-1R5M-T01	-	VLS4020CX-100M-H	1.0k	-	-	450	19.25	2.00
43	FPD-Link IV	✓	4.71875M~3.775G	1000	105	ADL2012-R80M-T01	-	TFM201210ALMA1R5MTAA	1.0k	VLS5030EX-150M-D	1.5k	394	32.75	3.00
44	FPD-Link IV	✓	4.71875M~3.775G	1000/900	115/125	ADL3225VM-2R2M-TL001	-	ADL3225VM-2R2M-TL001	1.5k	ADM45FDC-100M	1.5k	620	31.40	3.00

Insertion Loss



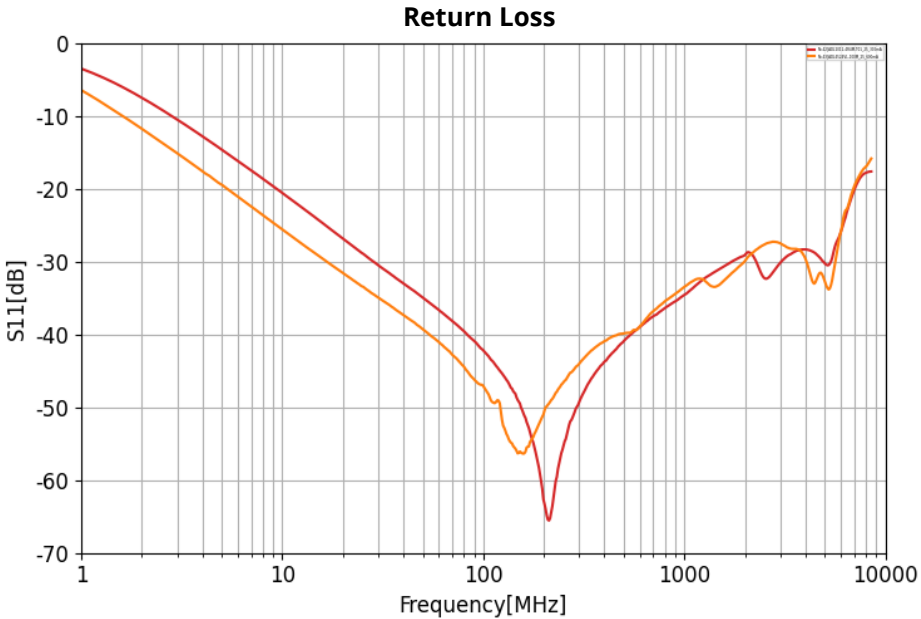
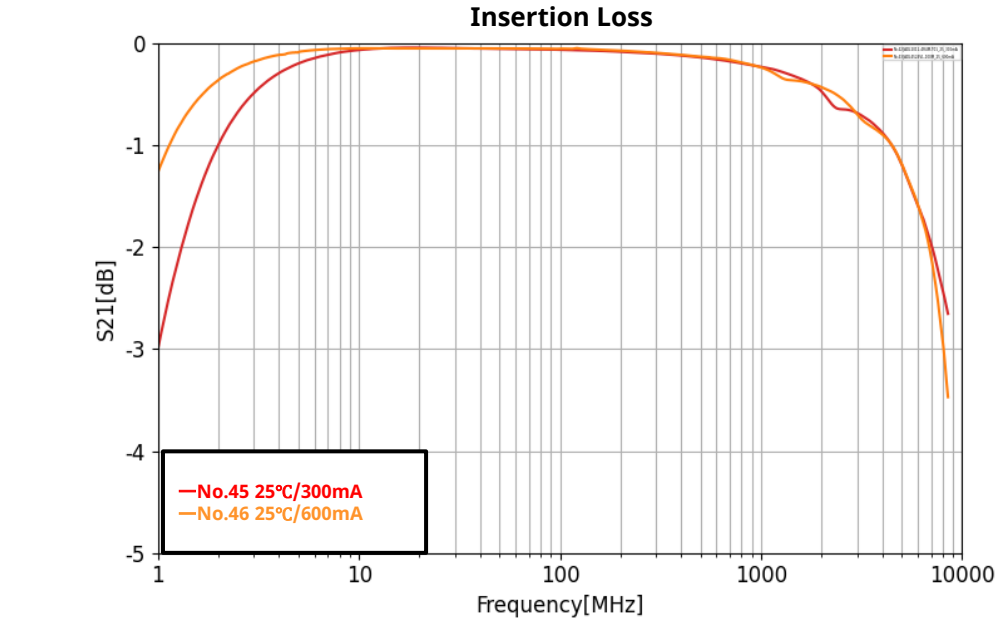
Return Loss



FPD-Link IV : 300mA~600mA(23.59375M~3.775GHz)

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
45	FPD-Link IV		23.59375M~3.775G	300	105	ADL2012-4R4M-T01	-	-	-	-	-	900	2.75	1.75
46	FPD-Link IV	✓	23.59375M~3.775G	600/500	105/115	ADL4524VL-100M-TL000	-	-	-	-	-	600	10.80	2.80

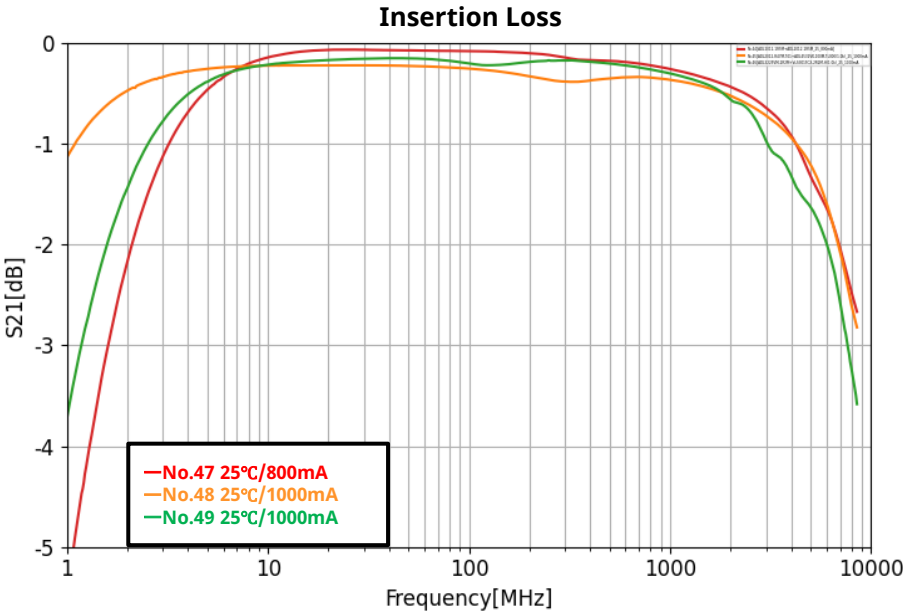


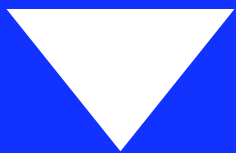


FPD-Link IV : 800mA~1000mA(23.59375M~3.775GHz)

Reference approval granted

No.	Criteria	Ref.	Frequency Range [Hz]	Max bias current [mA]	Ambi. temp. [°C]	Part1		Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm ²]	Max Height [mm]
						L1	R1	L2	R2	L3	R3			
47	FPD-Link IV		23.59375M~3.775G	800	105	ADL2012-1R5M-T01	-	ADL2012-1R5M-T01	-	-	-	420	5.50	1.75
48	FPD-Link IV	✓	23.59375M~3.775G	1000	105	ADL2012-R47M-T01	-	ADL4532VK-100M-TL000	1.0k	-	-	335	17.65	3.40
49	FPD-Link IV	✓	23.59375M~3.775G	1000	105	ADL3225VM-2R2M-TL001	-	VLS3015CX-2R2M-H	1.0k	-	-	240	17.50	2.50





Products Information

ADL Series

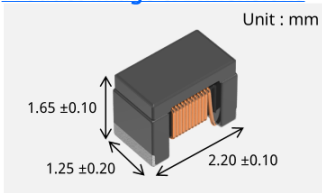
ADL2012 (for High Frequency) Wire Wound

In Mass Production

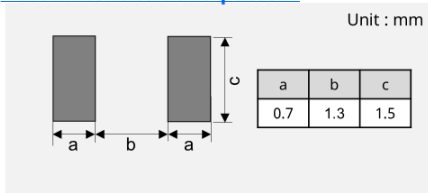
Features

- Small size and thin form factor (mounting area 2.2 x 1.25 mm, height 1.75mm max.)
- Achieving broadband impedance characteristics and good DC superimposition characteristics as the result of an original coiled wiring design and original structure
- Operating temperature range: -40 to +135°C (including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern

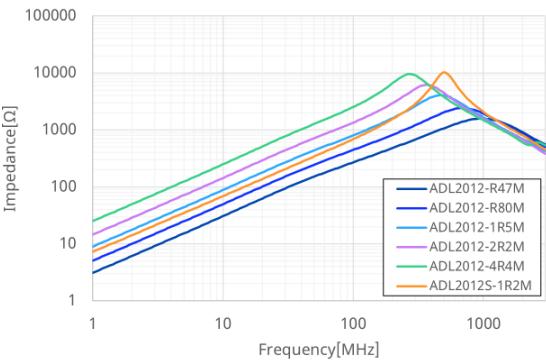


Electrical Characteristics

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	SRF typ. [MHz]	Isat. typ. [mA]	Itemp. typ. [mA]		
					Ambient temp. [deg.C]		
					85	105	125
ADL2012-R47M-T01	0.47	0.10	1000	>2000	—	1100	650
ADL2012-R80M-T01	0.80	0.13	700	1800	—	1000	600
ADL2012-1R5M-T01	1.5	0.21	450	1200	1100	800	450
ADL2012-2R2M-T01	2.2	0.50	360	900	700	550	300
ADL2012S-1R2M-T01	1.2	0.50	500	—	700	550	300
ADL2012-4R4M-T01	4.4	0.9	260	650	—	350	200

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp (105°C) : based on "the temperature increasing". (Temperature increase 30 deg.C by self heating.)
Itemp (125°C) : based on "the temperature increasing". (Temperature increase 10 deg.C by self heating.)
*Itemp. are reference values evaluated on a single-layer PCB with a total thickness of 1mm and a Cu layer thickness of 70um.
Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

Impedance Characteristics



-  : The blue cells are listed and contain samples.
-  : White cells are not enclosed. Please contact the sales person in charge.

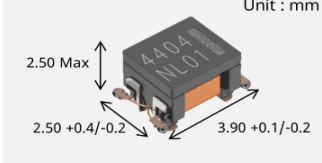
ADL32VHC (High Impedance) Wire Wound

In Mass Production

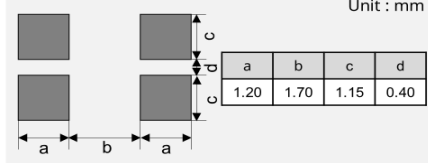
Features

- Small size and thin form factor (mounting area 3.2 x 2.5 mm, height 2.5mm max.)
- Achieving broadband impedance characteristics and good DC superimposition characteristics as the result of an original coiled wiring design and original structure
- Operating temperature range: -55 to +150°C (including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern

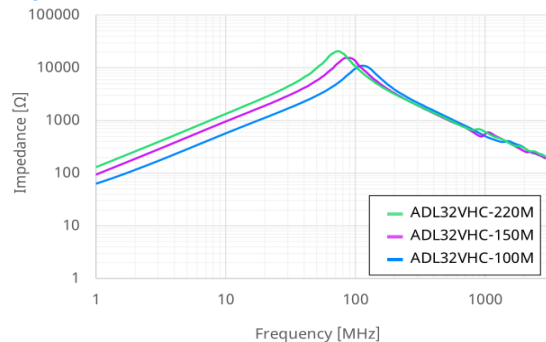


Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]		
			25	Ambient temp. [deg.C]		
				25	105	125
ADL32VHC-100M	10	0.31	950	1000	900	710
ADL32VHC-150M	15	0.63	750	700	620	500
ADL32VHC-220M	22	0.89	640	580	520	420

Isat : Current value at -30% inductance change (relative to initial value) in DC superposition.
Itemp. 25°C, 105°C: Current value at 40°C self-heating when a product is mounted on the board for self-heating measurement.
Itemp. 125°C: Current value at 25°C self-heating when a product is mounted on the board for self-heating measurement.
*Itemp. are reference values evaluated on a single-layer PCB with a total thickness of 1mm and a Cu layer thickness of 70um.
Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

Impedance Characteristics



-  : The blue cells are listed and contain samples.
-  : White cells are not enclosed. Please contact the sales person in charge.

ADL Series

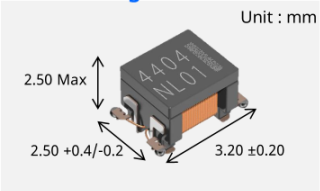
ADL32VHC-180MF (1 Coil Solution) Wire Wound

In Mass Production

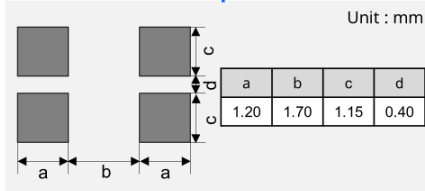
Features

- Small size and thin form factor (mounting area 3.2 x 2.5 mm, height 2.5mm max.)
- Achieving broadband impedance characteristics and good DC superimposition characteristics as the result of an original coiled wiring design and original structure
- Operating temperature range: -55 to +150°C (including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern

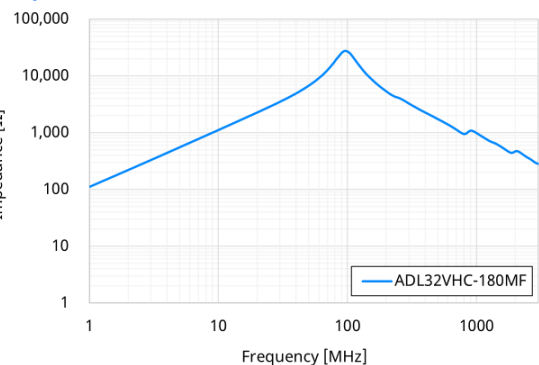


Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ.[mA]	Itemp. typ. [mA]		
			Ambient temp. [°C]			
			25	25	105	125
ADL32VHC-180MF	18	0.89	690	580	520	420

Isat. : Current value at -30% inductance change (relative to initial value) in DC superposition.
Itemp. 25°C, 105°C: Current value at 40°C self-heating when a product is mounted on the board for self-heating measurement.
Itemp. 125°C: Current value at 25°C self-heating when a product is mounted on the board for self-heating measurement.
*Itemp. are reference values evaluated on a single-layer PCB with a total thickness of 1mm and a Cu layer thickness of 70um.
Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

Impedance Characteristics



-  : The blue cells are listed and contain samples.
-  : White cells are not enclosed. Please contact the sales person in charge.

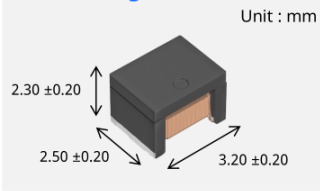
ADL3225V-T (High Impedance) Wire Wound

In Mass Production

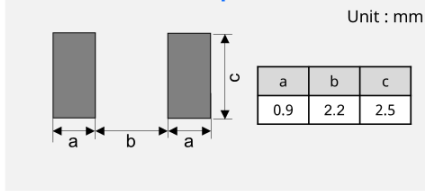
Features

- Small size and thin form factor (mounting area 3.2 x 2.5 mm, height 2.5mm max.)
- Achieving broadband impedance characteristics and good DC superimposition characteristics as the result of an original coiled wiring design and original structure
- Ensuring consistent high quality and reliability as the result of a completely automated manufacturing process
- Operating temperature range: -40 to +115°C (including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern

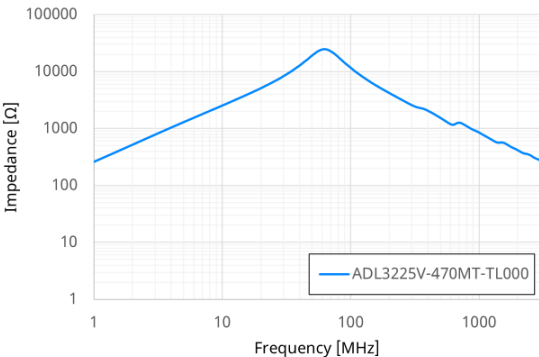


Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]
ADL3225V-470MT-TL000	47	0.9	300	500

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 °C by self heating.)

Impedance Characteristics



-  : The blue cells are listed and contain samples.
-  : White cells are not enclosed. Please contact the sales person in charge.

ADL Series

ADL3225V-S (1 Coil Solution)

Wire Wound

In Mass Production

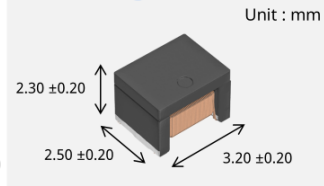
- Features
- Small size and thin form factor (mounting area 3.2 x 2.5 mm, height 2.5mm max.)
 - Achieving broadband impedance characteristics and good DC superimposition characteristics as the result of an original coiled wiring design and original structure
 - Ensuring consistent high quality and reliability as the result of a completely automated manufacturing process
 - Operating temperature range: -40 to +135°C (including self-temperature rise)
 - Compliant with AEC-Q200

Electrical Characteristics

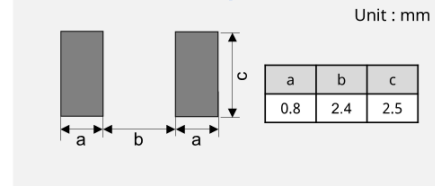
Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]	
			Ambient temp. [deg.C]	25	105
ADL3225V-220MS-TL000	22	0.73	490	520	300

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp (105°C) : based on "the temperature increasing". (Temperature increase 30°C by self heating.)
Itemp (125°C) : based on "the temperature increasing". (Temperature increase 10°C by self heating.)

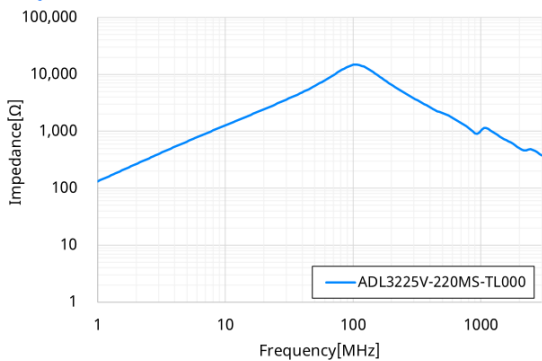
Product image & Dimensions



Recommended Land pattern



Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

ADL3225VF (for High Current)

Wire Wound

In Mass Production

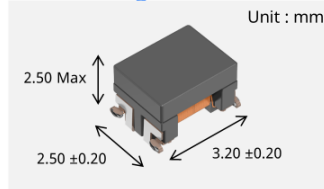
- Features
- Small size and thin form factor (mounting area 3.2 x 2.5 mm, height 2.5mm max.)
 - Achieving broadband impedance characteristics and good DC superimposition characteristics as the result of an original coiled wiring design and original structure
 - Operating temperature range: -55 to +155°C (including self-temperature rise)
 - Compliant with AEC-Q200

Electrical Characteristics

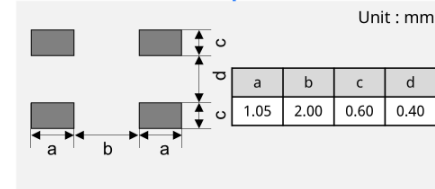
Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]	
			Ambient temp. [°C]	25	105
ADL3225VF-R49M-TL000	0.49	0.11	>2000	1600	1250
ADL3225VF-2R0M-TL000	2.0	0.18	1330	1290	1000

Isat. : Current value at -30% inductance change (relative to nominal value) in DC superposition.
Itemp. 105°C: Current value at 50°C self-heating when a product is mounted on the board for self-heating measurement.
Itemp. 125°C: Current value at 30°C self-heating when a product is mounted on the board for self-heating measurement.
*Itemp. are reference values evaluated on a single-layer PCB with a total thickness of 1mm and a Cu layer thickness of 70um.
Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

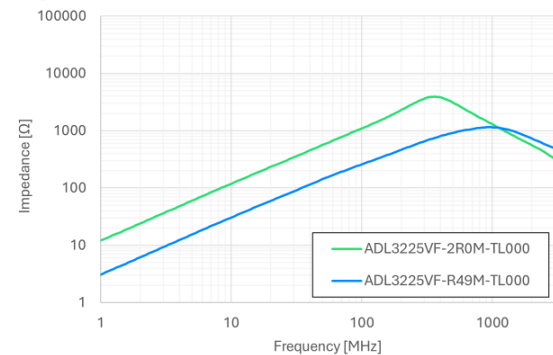
Product image & Dimensions



Recommended Land pattern



Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

ADL Series

ADL3225VM (for High Current) Wire Wound

In Mass Production

Features

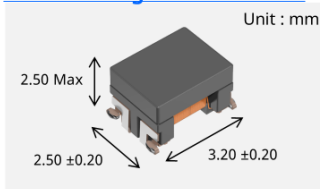
- Small size and thin form factor (mounting area 3.2 x 2.5 mm, height 2.5mm max.)
- Achieving broadband impedance characteristics as the result of an original coiled wiring design and original structure
- Ensuring consistent high quality and reliability as the result of a completely automated manufacturing process
- Operating temperature range: -55 to +155°C (including self-temperature rise)
- Compliant with AEC-Q200

Electrical Characteristics

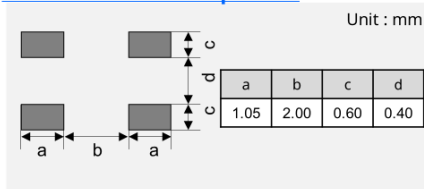
Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]		Itemp. typ. [mA]	
			Ambient temp. [°C]			
			105	125	105	125
ADL3225VM-2R2M-TL001	2.2	0.18	1050	1000	1220	1045
ADL3225VM-150M-TL001	15	0.4	350	310	725	625

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp (105°C) : based on "the temperature increasing". (Temperature increase 40 °C by self heating.)
Itemp (125°C) : based on "the temperature increasing". (Temperature increase 30 °C by self heating.)
*Itemp. are reference values evaluated on a single-layer PCB with a total thickness of 1mm and a Cu layer thickness of 70um.
Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

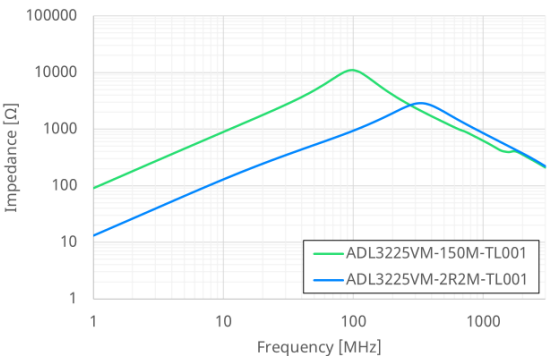
Product image & Dimensions



Recommended Land pattern



Impedance Characteristics



-  : The blue cells are listed and contain samples.
-  : White cells are not enclosed. Please contact the sales person in charge.

ADL3225VT (Low DCR) Wire Wound

In Mass Production

Features

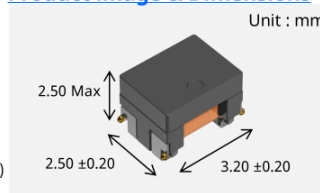
- Small size and thin form factor (mounting area 3.2 x 2.5 mm, height 2.5mm max.)
- Achieving broadband impedance characteristics as the result of an original coiled wiring design and original structure
- Ensuring consistent high quality and reliability as the result of a completely automated manufacturing process
- Operating temperature range: -40 to +150°C (including self-temperature rise)
- Compliant with AEC-Q200

Electrical Characteristics

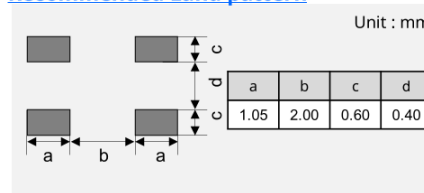
Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]
ADL3225VT-4R7M-TL000	4.7	0.10	720	1500
ADL3225VT-100M-TL000	10	0.15	450	1300

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 °C by self heating.)

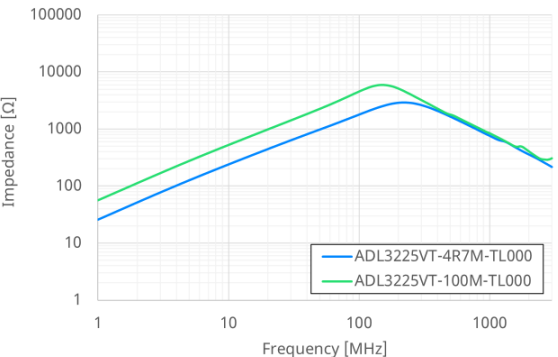
Product image & Dimensions



Recommended Land pattern



Impedance Characteristics



-  : The blue cells are listed and contain samples.
-  : White cells are not enclosed. Please contact the sales person in charge.

ADL Series

ADL4524VL (1 Coil Solution)

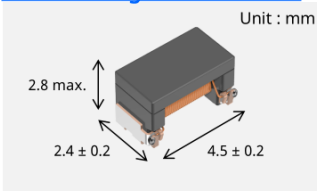
Wire Wound

In Mass Production

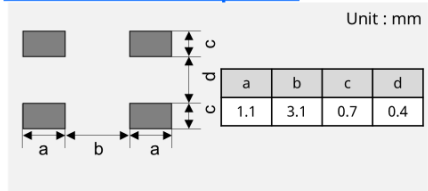
Features

- Achieving broadband impedance characteristics and good DC superimposition characteristics as the result of an original coiled wiring design and original structure
- Operating temperature range: -55 to +155°C (including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern

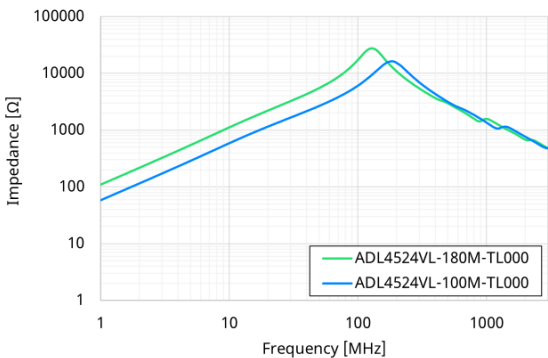


Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]			Itemp. typ. [mA]		
			Ambient temp. [deg.C]					
			25	105	125			
ADL4524VL-100M-TL000	10	0.60	660	600	510			
ADL4524VL-180M-TL000	18	0.80	510	520	440			

Isat. : Current value at -30% inductance change (relative to nominal value) in DC superposition.
Itemp. 105°C: Current value at 40°C self-heating when a product is mounted on the board for self-heating measurement.
Itemp. 125°C: Current value at 30°C self-heating when a product is mounted on the board for self-heating measurement.
*Itemp. are reference values evaluated on a single-layer PCB with a total thickness of 1mm and a Cu layer thickness of 70um.
Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

ADL4532VK (for High Current)

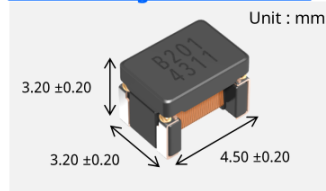
Wire Wound

In Mass Production

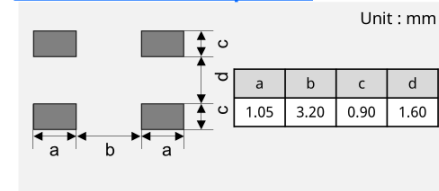
Features

- ADL4532VK is available for High current application
- ADL4532VK series corresponds to RoHS.
- Operating temperature range: -55deg.C to 155deg.C (Self-rise temperature included)
- Based on AEC-Q200

Product image & Dimensions



Recommended Land pattern

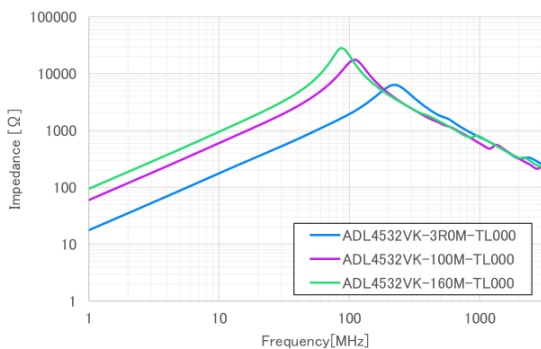


Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]			Itemp. typ. [mA]		
			Ambient temp. [°C]					
			25	105	125			
ADL4532VK-3R0M-TL000	3	0.125	2100	1650	1300			
ADL4532VK-100M-TL000	10	0.235	1250	1200	940			
ADL4532VK-160M-TL000	16	0.470	950	830	640			

Isat. : Current value at -30% inductance change (relative to nominal value) in DC superposition.
Itemp. 105°C: Current value at 50°C self-heating when a product is mounted on the board for self-heating measurement.
Itemp. 125°C: Current value at 30°C self-heating when a product is mounted on the board for self-heating measurement.
*Itemp. are reference values evaluated on a single-layer PCB with a total thickness of 1mm and a Cu layer thickness of 70um.
Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

ADL/ADM Series

ADL8030VA (1 Coil Solution)

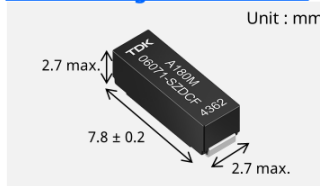
Wire Wound

In Mass Production

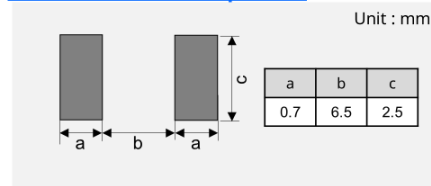
Features

- Robust construction for a high mechanical stability
- Qualified according to AEC-Q200
- High Impedance for wide frequency range
- Suitable for pick and place and AOI (Automatic Optical Inspection)
- Suitable for lead-free reflow soldering as referenced in JEDEC J-STD-020E
- RoHS-compatible

Product image & Dimensions



Recommended Land pattern



Electrical Characteristics

Part #	L at 100kHz [uH] +/- 20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]		
				Ambient temp. [°C]		
				25	105	115
ADL8030VA-100M	10	0.38	2400	820	730	720
ADL8030VA-150M	15	0.47	1800	790	680	660
ADL8030VA-180M	18	0.52	1700	770	650	630
ADL8030VA-220M	22	0.57	1500	740	600	570
ADL8030VA-680M	68	1.69	800	420	350	340
ADL8030VA-101M	100	2.54	700	330	280	270

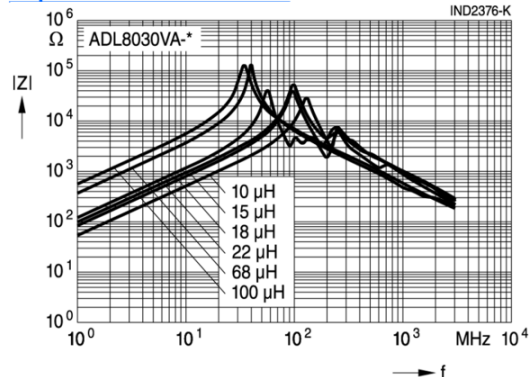
Isat.: Typical permissible DC with inductance decrease $\Delta L/L_0 \leq 30\%$ at $T_{ambient}$

Itemp.: Maximum permissible DC with temperature increase of $\leq 40\text{ K}$ at $T_{ambient}$

*Itemp. are reference values evaluated based on IEC 62024-2, class B.

Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

Impedance Characteristics



: The blue cells are listed and contain samples.

: White cells are not enclosed. Please contact the sales person in charge.

ADM32FSC

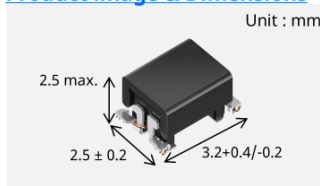
Wire Wound

In Mass Production

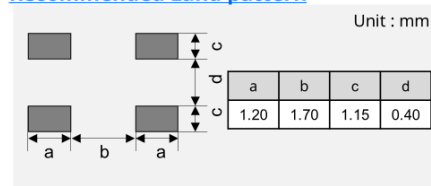
Features

- Temperature range up to +165 °C
- Suitable for lead-free reflow soldering as referenced in JEDEC J-STD-020E
- Qualified according to AEC-Q200
- RoHS-compatible

Product image & Dimensions



Recommended Land pattern



Electrical Characteristics

Part #	L at 100kHz [uH] +/- 20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]		
				Ambient temp. [°C]		
				25	105	125
ADM32FSC-100M	10	0.42	1060	880	790	770
ADM32FSC-220M	22	0.60	740	740	680	660

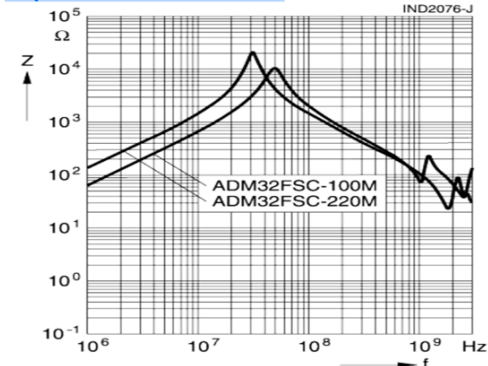
Isat.: Based on the inductance change rate (30% below the initial value)

Itemp.: Based on the temperature increase (+40 °C by self-heating) Ambient temperature: +25 °C / +105 °C / +125 °C

*Itemp. are reference values evaluated under consideration of generic multilayer PCB.

Temperature rise is highly dependent on many factors, so it should be verified under application conditions.

Impedance Characteristics



: The blue cells are listed and contain samples.

: White cells are not enclosed. Please contact the sales person in charge.

ADM Series

ADM45FDC

Wire Wound

In Mass Production

Features

- Operating temperature range: -40°C to +150°C
- Suitable for lead-free reflow soldering as referenced in IPC/JEDEC J-STD-020E
- Qualified to AEC-Q200
- RoHS compatible

Electrical Characteristics

Part #	L at 100kHz [uH] +/- 20%	DCR max. [ohm]	Isat. typ.[mA]		Itemp. typ. [mA]	
			Ambient temp. [°C]		Ambient temp. [°C]	
			25	25	105	125
ADM45FDC-100M	10	0.26	1800	900	790	620

Isat: Based on the inductance change rate of -30% of the initial value.
Itemp: Based on the temperature increase by self-heating.
At 25°C and 105°C: Itemp value calculated with 40°C self-heating, based on test PCB design acc. IEC 62024-2, current class A (≤1A).
At 125°C: Itemp value calculated with 25°C self-heating, based on test PCB design acc. IEC 62024-2, current class A (≤1A).

- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

Product image & Dimensions

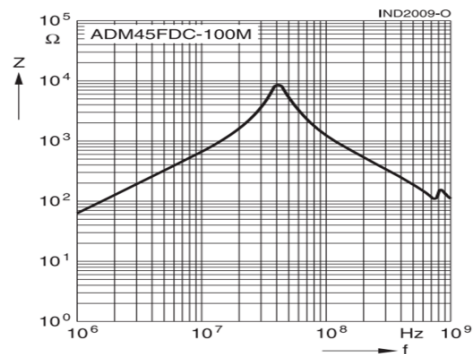
Unit : mm

Recommended Land pattern

Unit : mm

a	b	c	d
1.85	2.20	1.70	0.60

Impedance Characteristics



MLD Series



Datasheet

MLD2016 (High current)

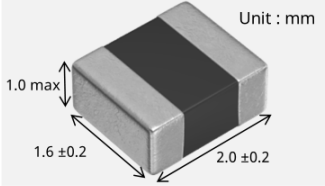
Multilayer

In Mass Production

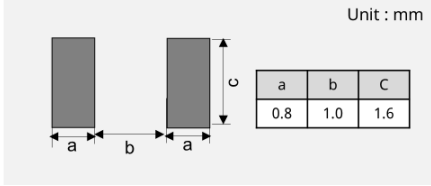
Features

- Being achieving high reliability by material application that was suitable for Automotive application and products design.
- In complete monolithic structure with multilayer cluster, be reducing flux leakage.
- Operating temperature range: -40deg.C to +125deg.C (including self-temperature rise)
- AEC-Q200

Product image & Dimensions



Recommended Land pattern

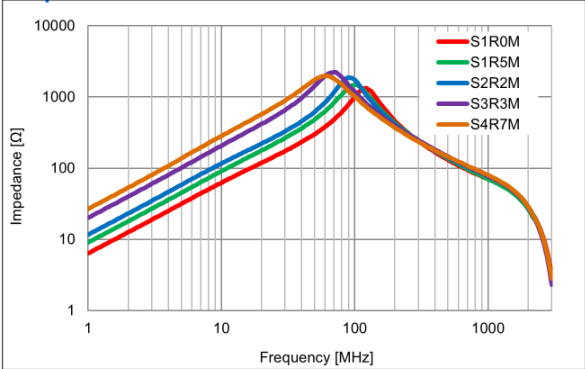


Electrical Characteristics

Part #	L at 2MHz [uH] +/- 20%	DCR +/-30% [ohm]	Rated current max. [mA]
MLD2016S1R0MTD25	1.0	0.12	1100
MLD2016S1R5MTD25	1.5	0.15	1000
MLD2016S2R2MTD25	2.2	0.17	900
MLD2016S3R3MTD25	3.3	0.23	800
MLD2016S4R7MTD25	4.7	0.25	750

Rated current : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

MLJ Series

MLJ1005-G (Small & Wide band)

Multilayer

In Mass Production

Features

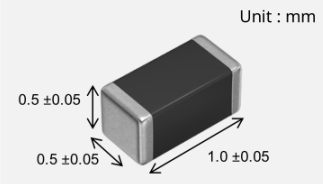
- The small multilayer inductor ideal for PoC circuits.
- A wide band and high impedance characteristics are realized by the original circuit structure.
- It is suitable for high current applications due to its good DC superimposition characteristics due to the low loss ferrite material.
- Operating temperature range: -55deg.C to +125deg.C
- AEC-Q200

Electrical Characteristics

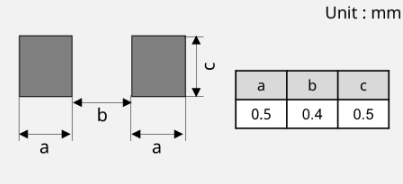
Part #	L at 25MHz [uH] +/- 25%	DCR [ohm]		Rated current max. [mA]	
		typ.	max.	Ambient temp. [deg.C]	
				105	125
MLJ1005WGHR27PTD25	0.27	0.53	0.69	480	400
MLJ1005WGHR36PTD25	0.36	0.66	0.86	430	300
MLJ1005WGHR47PTD25	0.47	0.88	1.15	350	250

Rated current (105°C) : based on "the temperature increasing". (Temperature increase 20 deg.C by self heating.)

Product image & Dimensions

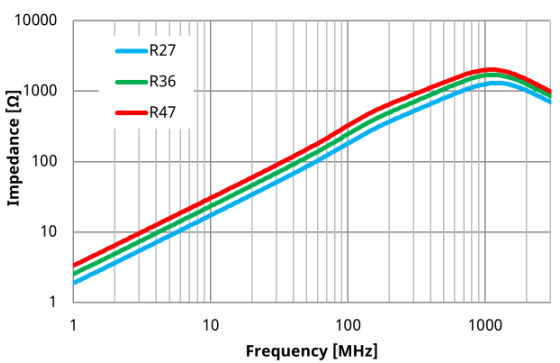


Recommended Land pattern



a	b	c
0.5	0.4	0.5

Impedance Characteristics



 : The blue cells are listed and contain samples.

 : White cells are not enclosed. Please contact the sales person in charge.

MLJ1608-G (Wide band)

Multilayer

Features

- The small multilayer inductor ideal for PoC circuits.
- A wide band and high impedance characteristics are realized by the original circuit structure.
- It is suitable for high current applications due to its good DC superimposition characteristics due to the low loss ferrite material.
- Operating temperature range: -55deg.C to +125deg.C
- AEC-Q200

Electrical Characteristics

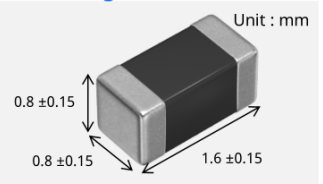
Part #	L at 25MHz	DCR [ohm]		Rated current max. [mA]		Status
		typ.	max.	Ambient temp. [deg.C]		
				105	125	
MLJ1608WGCR56NTD25	0.56uH +/-30%	0.45	0.70	500	400	M.P.
MLJ1608WGC1R2MTD25 *	1.25uH +/-20%	0.81	1.20	350	200	Under development

Rated current (105°C): based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

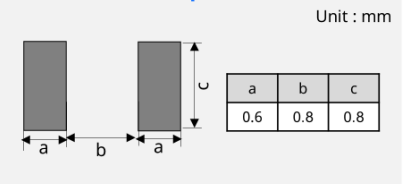
Rated current (125°C): based on "the temperature increasing". (Temperature increase 15 deg.C by self heating.)

MLJ1608WGC1R2MTD25 sample schedule
Evaluation sample : 2026/3
Approval sample & M.P. : 2026/6

Product image & Dimensions

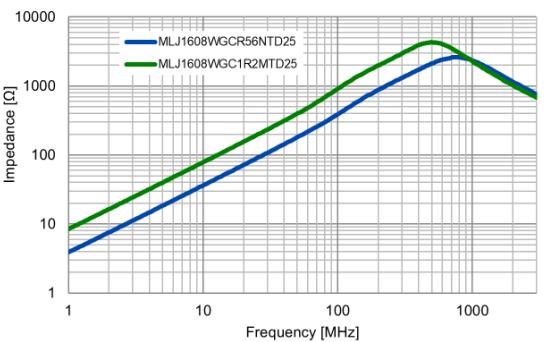


Recommended Land pattern



a	b	c
0.6	0.8	0.8

Impedance Characteristics



 : The blue cells are listed and contain samples.

 : White cells are not enclosed. Please contact the sales person in charge.

MLZ Series

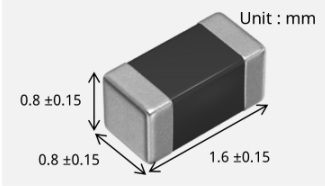
MLZ1608-C (High current) Multilayer

In Mass Production

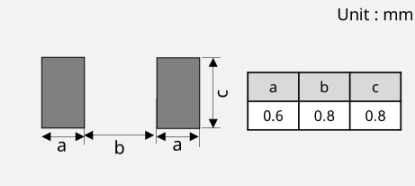
Features

- The small multilayer inductor ideal for PoC circuits.
- The MLZ series include inductors for decoupling circuits that have top-class DC superimposition characteristics and low resistance.
- Operating temperature range: -55deg.C to +125deg.C
- AEC-Q200

Product image & Dimensions



Recommended Land pattern

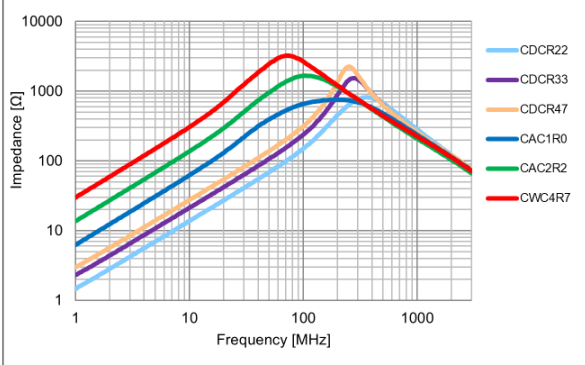


Electrical Characteristics

Part #	L measuring conditions Frequency [MHz]	L[uH] +/- 20%	DCR +/-30% [ohm]	Rated current max. [mA]	
				Ambient temp. [deg.C]	
				105	125
MLZ1608CDRC22MTD25	25	0.22	0.27	600	500
MLZ1608CDRC33MTD25	25	0.33	0.31	560	460
MLZ1608CDRC47MTD25	25	0.47	0.42	530	430
MLZ1608CAC1R0MTD25	10	1.0	0.15	740	640
MLZ1608CAC2R2MTD25	10	2.2	0.25	650	550
MLZ1608CWC4R7MTD25	2	4.7	0.50	490	390

Rated current (105°C) : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)
Rated current (125°C) : based on "the temperature increasing". (Temperature increase 20 deg.C by self heating.)

Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

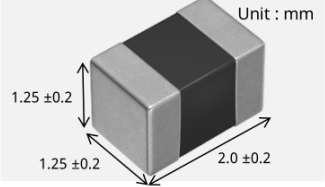
MLZ2012-H (Super High current) Multilayer

In Mass Production

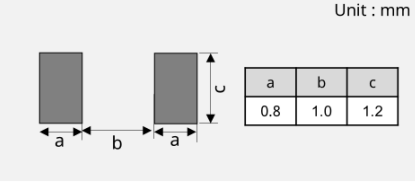
Features

- The MLZ series include inductors for decoupling circuits that have top-class DC superimposition characteristics and low resistance.
- They are compatible with wide frequency band noise, from low to high frequency.
- MLZ2012-H type products have a rated current that is equivalent to that of wound coils.
- Operating temperature range: -55deg.C to +125deg.C
- AEC-Q200

Product image & Dimensions



Recommended Land pattern

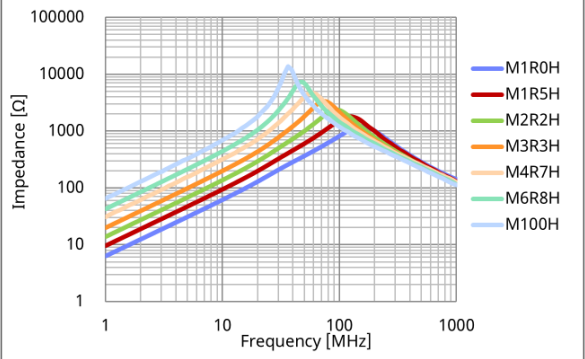


Electrical Characteristics

Part #	L at 2MHz [uH] +/- 20%	DCR +/-30% [ohm]	Rated current max. [mA]
MLZ2012M1R0HTD25	1.0	0.10	700
MLZ2012M1R5HTD25	1.5	0.14	550
MLZ2012M2R2HTD25	2.2	0.16	400
MLZ2012M3R3HTD25	3.3	0.20	350
MLZ2012M4R7HTD25	4.7	0.34	300
MLZ2012M6R8HTD25	6.8	0.40	220
MLZ2012M100HTD25	10	0.68	200

Rated current : based on "the inductance change rate". (50% below the nominal inductance value.)

Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

TFM Series

TFM201210ALMA (Low DCR, Low profile)

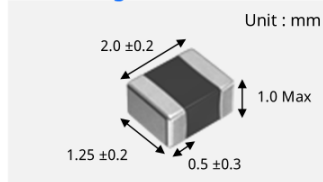
Thin Film

In Mass Production

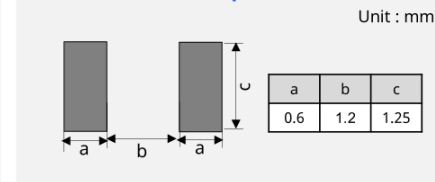
Features

- The thickness of this product is 1.0mm, and it is very thin compared with other same kind of products.
- This product consists of original fine copper pattern with micro-processing technology.
- This product corresponds to RoHS.

Product image & Dimensions



Recommended Land pattern



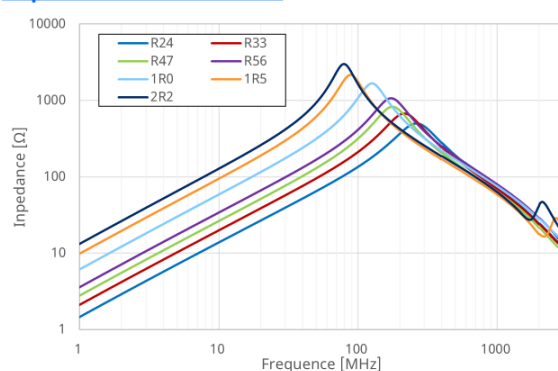
Electrical Characteristics

*Listed items are part of the full lineup.

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [mA]	Isat. typ. [mA]	Itemp. max. [mA]	Itemp. typ. [mA]
TFM201210ALMAR24MTAA	0.24	22	17	4.6	5.3	4.2	4.9
TFM201210ALMAR33MTAA	0.33	31	26	3.9	4.5	3.6	3.9
TFM201210ALMAR47MTAA	0.47	42	35	3.4	3.9	3.1	3.4
TFM201210ALMAR56MTAA	0.56	49	39	3.0	3.4	2.8	3.2
TFM201210ALMA1R0MTAA	1.0	81	69	2.7	3.1	2.2	2.4
TFM201210ALMA1R5MTAA	1.5	130	110	2.0	2.3	1.8	2.0
TFM201210ALMA2R2MTAA	2.2	282	240	1.2	1.4	1.1	1.3

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

Impedance Characteristics



: The blue cells are listed and contain samples.

: White cells are not enclosed. Please contact the sales person in charge.

TFM201610ALMA (Low DCR, Low profile)

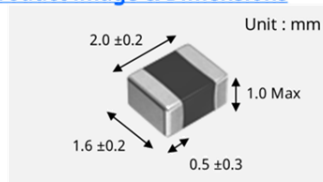
Thin Film

In Mass Production

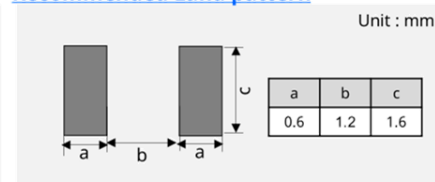
Features

- The thickness of this product is 1.0mm, and it is very thin compared with other same kind of products.
- This product consists of original fine copper pattern with micro-processing technology.
- This product corresponds to RoHS.

Product image & Dimensions



Recommended Land pattern



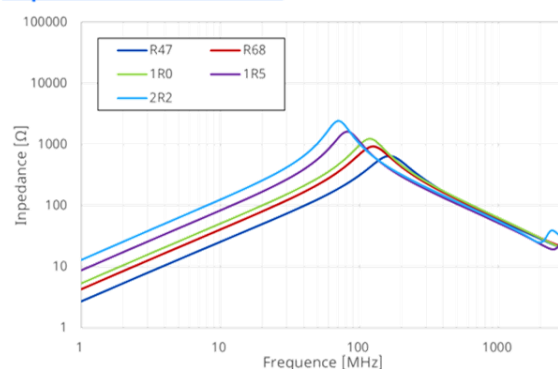
Electrical Characteristics

*Listed items are part of the full lineup.

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [mA]	Isat. typ. [mA]	Itemp. max. [mA]	Itemp. typ. [mA]
TFM201610ALMAR47MTAA	0.47	39	28	4.5	5.0	3.9	4.5
TFM201610ALMAR68MTAA	0.68	53	44	3.8	4.3	3.3	3.6
TFM201610ALMA1R0MTAA	1.0	60	50	3.3	3.7	3.1	3.4
TFM201610ALMA1R5MTAA	1.5	110	85	2.8	3.1	2.3	2.6
TFM201610ALMA2R2MTAA	2.2	152	130	2.0	2.2	1.9	2.1

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

Impedance Characteristics



: The blue cells are listed and contain samples.

: White cells are not enclosed. Please contact the sales person in charge.

TFM Series

TFM252012ALMA (Low DCR, Low profile)

Thin Film

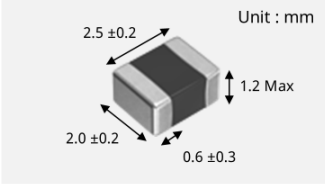


In Mass Production

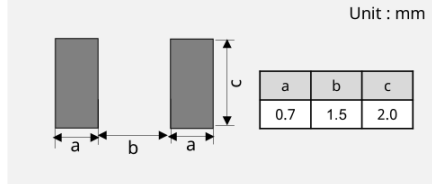
Features

- The thickness of this product is 1.2mm, and it is very thin compared with other same kind of products.
- This product consists of original fine copper pattern with micro-processing technology .
- This product corresponds to RoHS.

Product image & Dimensions



Recommended Land pattern



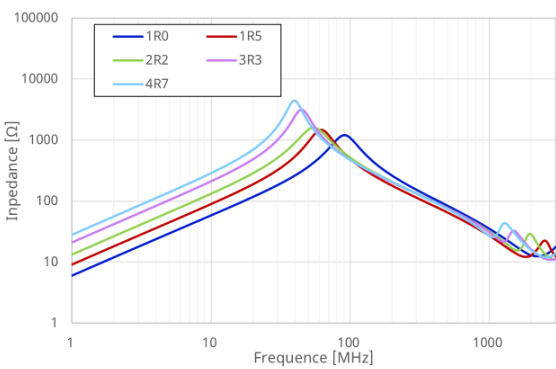
Electrical Characteristics

*Listed items are part of the full lineup.

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [mA]	Isat. typ. [mA]	Itemp. max. [mA]	Itemp. typ. [mA]
TFM252012ALMA1R0MTAA	1.0	42	35	4.2	4.7	3.7	4.1
TFM252012ALMA1R5MTAA	1.5	60	52	3.3	3.9	3.1	3.3
TFM252012ALMA2R2MTAA	2.2	84	75	2.8	3.3	2.6	2.8
TFM252012ALMA3R3MTAA	3.3	140	124	2.1	2.5	2.0	2.2
TFM252012ALMA4R7MTAA	4.7	200	180	1.9	2.2	1.6	1.8

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

TFM322512ALMA (Low DCR, Low profile)

Thin Film

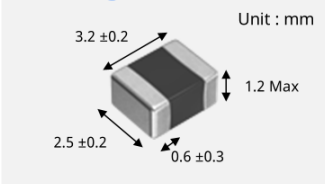


In Mass Production

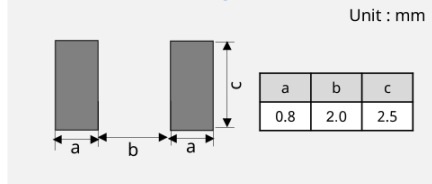
Features

- The thickness of this product is 1.2mm, and it is very thin compared with other same kind of products.
- This product consists of original fine copper pattern with micro-processing technology .
- This product corresponds to RoHS.

Product image & Dimensions



Recommended Land pattern



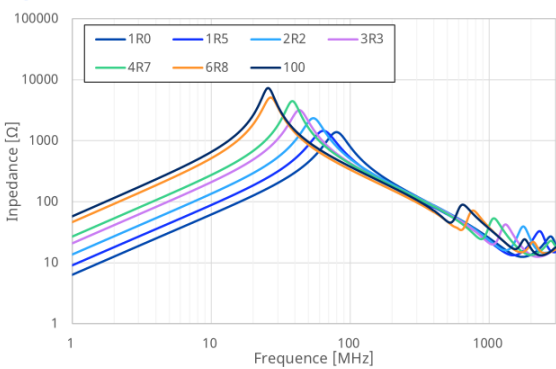
Electrical Characteristics

*Listed items are part of the full lineup.

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [mA]	Isat. typ. [mA]	Itemp. max. [mA]	Itemp. typ. [mA]
TFM322512ALMA1R0MTAA	1.0	37	30	4.6	5.1	4.0	4.4
TFM322512ALMA1R5MTAA	1.5	57	46	4.0	4.5	3.2	3.5
TFM322512ALMA2R2MTAA	2.2	77	64	3.3	3.6	2.7	3.0
TFM322512ALMA3R3MTAA	3.3	113	97	2.5	2.8	2.3	2.5
TFM322512ALMA4R7MTAA	4.7	151	127	2.2	2.5	1.9	2.1
TFM322512ALMA6R8MTAA	6.8	260	220	1.8	2.1	1.4	1.6
TFM322512ALMA100MTAA	10	360	305	1.6	1.8	1.2	1.4

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

Impedance Characteristics



- : The blue cells are listed and contain samples.
- : White cells are not enclosed. Please contact the sales person in charge.

VLS Series

VLS3015CX-H

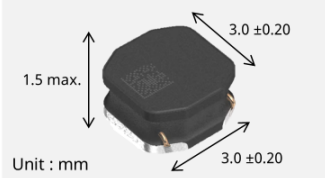
Wire Wound

In Mass Production

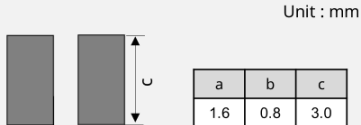
Features

- Package size is 3.0mm (L) x 3.0mm(W) x 1.5mm(T)
- VLS3015CX-H series corresponds to RoHS
- Operating temperature range from -40deg.C to 125deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern



Electrical Characteristics

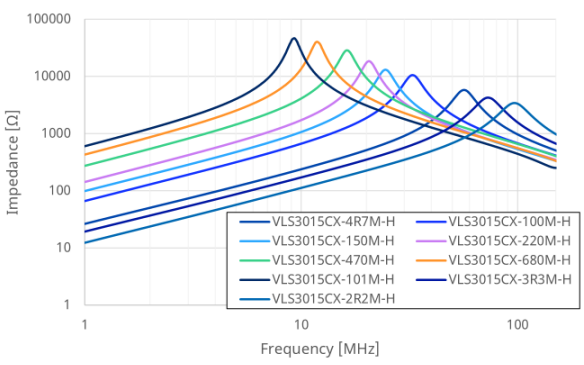
*Listed items are part of the full lineup.

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [A]	Isat. typ. [A]	Itemp. max. [A]	Itemp. typ. [A]
VLS3015CX-2R2M-H	2.2	0.060	0.050	1.48	1.85	2.14	2.67
VLS3015CX-3R3M-H	3.3	0.101	0.084	1.29	1.52	1.79	2.24
VLS3015CX-4R7M-H	4.7	0.120	0.100	1.15	1.35	1.70	2.13
VLS3015CX-100M-H	10	0.286	0.238	0.67	0.79	0.9	1.13
VLS3015CX-150M-H	15	0.428	0.357	0.57	0.67	0.84	1.05
VLS3015CX-220M-H	22	0.660	0.550	0.45	0.53	0.73	0.91
VLS3015CX-470M-H	47	1.392	1.160	0.29	0.34	0.48	0.60
VLS3015CX-680M-H	68	2.256	1.880	0.24	0.27	0.36	0.45
VLS3015CX-101M-H	100	2.544	2.120	0.23	0.26	0.30	0.33

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

- ☒ : The blue cells are listed and contain samples.
- ☐ : White cells are not enclosed. Please contact the sales person in charge.

Impedance Characteristics



VLS3015CZ-HE

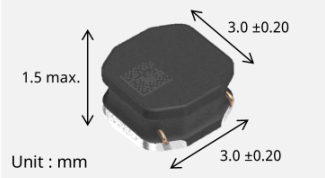
Wire Wound

In Mass Production

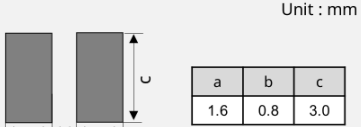
Features

- Package size is 3.0mm (L) x 3.0mm(W) x 1.5mm(T)
- VLS3015CZ-HE series corresponds to RoHS
- Operating temperature range from -40deg.C to 135deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern



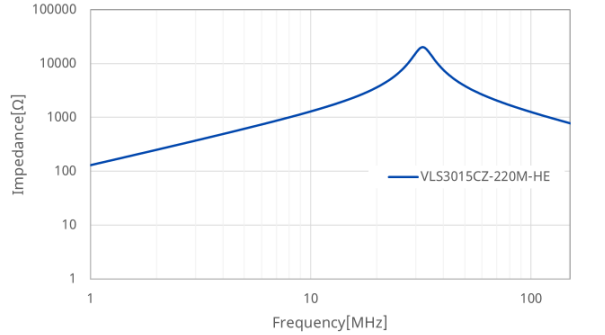
Electrical Characteristics

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]		
				Ambient temp. [deg.C]		
VLS3015CZ-220M-HE	22	0.776	635	85	105	125

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp (105°C) : based on "the temperature increasing". (Temperature increase 30 deg.C by self heating.)
Itemp (125°C) : based on "the temperature increasing". (Temperature increase 10 deg.C by self heating.)
*Itemp. are reference values evaluated under consideration of Cu thickness on both sides of a single layer PCB 100x40x1.6mm.
Temperature rise is highly dependent on many factors so it should be verified for application conditions.

- ☒ : The blue cells are listed and contain samples.
- ☐ : White cells are not enclosed. Please contact the sales person in charge.

Impedance Characteristics



VLS Series

VLS4015CX-H

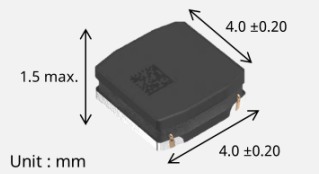
Wire Wound

In Mass Production

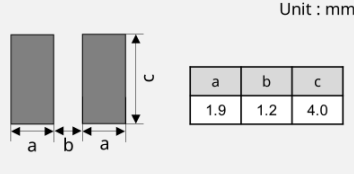
Features

- Package size is 4.0mm (L) x 4.0mm(W) x 1.5mm(T)
- VLS4015CX-H series corresponds to RoHS
- Operating temperature range from -40deg.C to 125deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern

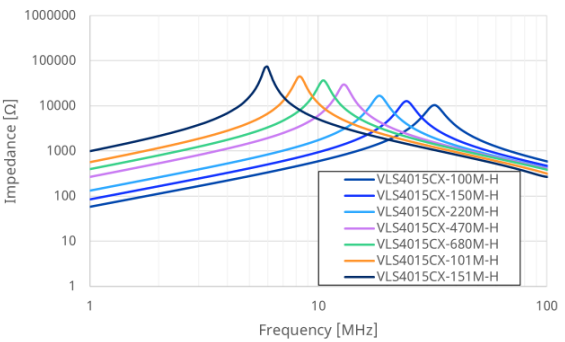


Electrical Characteristics

*Listed items are part of the full lineup.

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [A]	Isat. typ. [A]	Itemp. max. [A]	Itemp. typ. [A]
VLS4015CX-100M-H	10	0.252	0.210	1.42	1.58	1.16	1.45
VLS4015CX-150M-H	15	0.372	0.310	1.21	1.34	1.06	1.32
VLS4015CX-220M-H	22	0.540	0.450	0.87	0.97	0.87	1.09
VLS4015CX-470M-H	47	1.20	1.00	0.57	0.63	0.63	0.79
VLS4015CX-680M-H	68	1.72	1.43	0.54	0.60	0.57	0.71
VLS4015CX-101M-H	100	2.40	2.00	0.47	0.52	0.47	0.59
VLS4015CX-151M-H	150	4.21	3.51	0.39	0.43	0.33	0.41

Impedance Characteristics



Isat : based on "the inductance change rate", (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing", (Temperature increase 40 deg.C by self heating.)

 : The blue cells are listed and contain samples.

 : White cells are not enclosed. Please contact the sales person in charge.

VLS4020CX-H

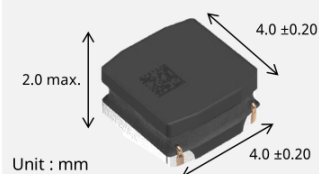
Wire Wound

In Mass Production

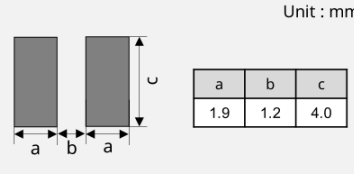
Features

- Package size is 4.0mm (L) x 4.0mm(W) x 2.0mm(T)
- VLS4020CX-H series corresponds to RoHS
- Operating temperature range from -40deg.C to 125deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern

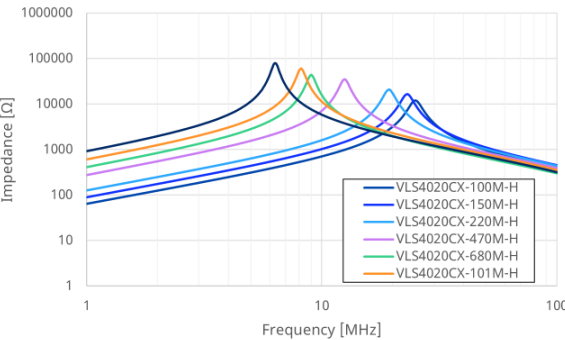


Electrical Characteristics

*Listed items are part of the full lineup.

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [A]	Isat. typ. [A]	Itemp. max. [A]	Itemp. typ. [A]
VLS4020CX-6R8M-H	6.8	0.156	0.130	2.07	2.30	1.84	2.30
VLS4020CX-100M-H	10	0.240	0.200	1.62	1.80	1.52	1.90
VLS4020CX-150M-H	15	0.312	0.260	1.35	1.50	1.28	1.60
VLS4020CX-220M-H	22	0.432	0.360	1.17	1.30	1.04	1.30
VLS4020CX-470M-H	47	0.936	0.780	0.74	0.82	0.71	0.89
VLS4020CX-680M-H	68	1.36	1.13	0.65	0.72	0.59	0.73
VLS4020CX-101M-H	100	2.04	1.70	0.53	0.59	0.47	0.59
VLS4020CX-151M-H	150	3.24	2.70	0.47	0.52	0.35	0.44

Impedance Characteristics



Isat : based on "the inductance change rate", (30% below the nominal inductance value.)
Itemp : based on "the temperature increasing", (Temperature increase 40 deg.C by self heating.)

 : The blue cells are listed and contain samples.

 : White cells are not enclosed. Please contact the sales person in charge.

VLS Series

VLS5030EX-D

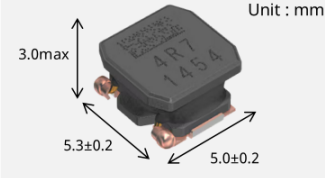
Wire Wound

In Mass Production

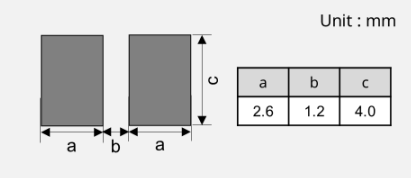
Features

- Package size is 5.5mm max.(L) X 5.2mm max.(W)
- VLS5030EX-D is available for High current
- VLS-EX series corresponds to RoHS.
- Operating temperature range from -40deg.C to 150deg.C
- (Self-rise temperature included)
- Compliant with AEC-Q200 Rev.D

Product image & Dimensions



Recommended Land pattern



Electrical Characteristics

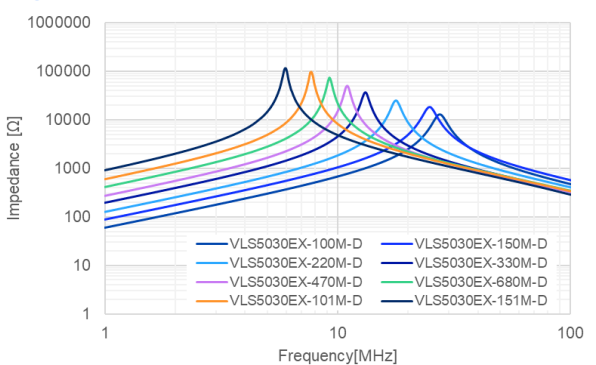
*Listed items are part of the full lineup.

Part #	L at 100kHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [A]	Isat. typ. [A]	Itemp. typ. [A]
VLS5030EX-100M-D	10	0.096	0.080	2.1	2.4	2.4
VLS5030EX-150M-D	15	0.144	0.12	1.6	1.8	1.9
VLS5030EX-220M-D	22	0.216	0.18	1.5	1.7	1.6
VLS5030EX-330M-D	33	0.324	0.27	1.1	1.3	1.3
VLS5030EX-470M-D	47	0.42	0.35	0.99	1.1	1.1
VLS5030EX-680M-D	68	0.66	0.55	0.82	0.92	0.91
VLS5030EX-101M-D	100	0.96	0.80	0.65	0.73	0.75
VLS5030EX-151M-D	150	1.392	1.16	0.54	0.61	0.63

Isat : based on "the inductance change rate". (30% below the initial inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

*Itemp. are reference values evaluated under consideration of Cu thickness single layer PCB 100x40x1.6mm.
Temperature rise is highly dependent on many factors so it should be verified for application conditions.

Impedance Characteristics



- ☒ : The blue cells are listed and contain samples.
- ☐ : White cells are not enclosed. Please contact the sales person in charge.

VLS5045EX-H

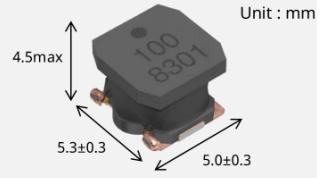
Wire Wound

In Mass Production

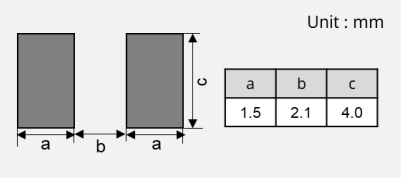
Features

- Package size is 5.6mm max.(L) X 5.3mm max.(W)
- VLS5045EX-H is available for High current
- VLS-EX series corresponds to RoHS.
- Operating temperature range from -40deg.C to 125deg.C
- (Self-rise temperature included)
- Compliant with AEC-Q200 Rev.D

Product image & Dimensions



Recommended Land pattern



Electrical Characteristics

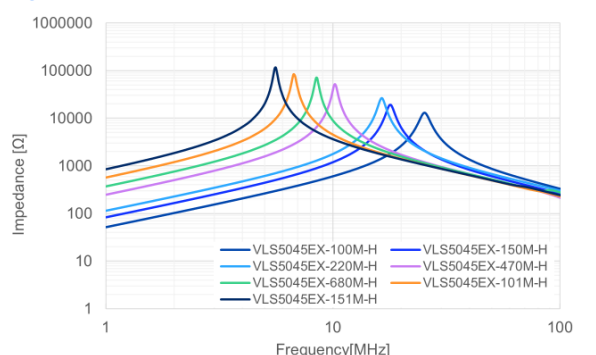
*Listed items are part of the full lineup.

Part #	L at 100kHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [A]	Isat. typ. [A]	Itemp. typ. [A]
VLS5045EX-100M-H	10	0.0793	0.061	3.1	3.2	2.5
VLS5045EX-150M-H	15	0.143	0.110	2.2	2.6	1.9
VLS5045EX-220M-H	22	0.1625	0.125	2.0	2.2	1.8
VLS5045EX-470M-H	47	0.390	0.30	1.3	1.4	1.0
VLS5045EX-680M-H	68	0.533	0.41	1.1	1.2	0.90
VLS5045EX-101M-H	100	0.754	0.58	0.80	1.0	0.70
VLS5045EX-151M-H	150	0.949	0.73	0.56	0.66	0.61

Isat : based on "the inductance change rate". (30% below the initial inductance value.)
Itemp : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)

*Itemp. are reference values evaluated under consideration of Cu thickness single layer PCB 100x40x1.6mm.
Temperature rise is highly dependent on many factors so it should be verified for application conditions.

Impedance Characteristics



- ☒ : The blue cells are listed and contain samples.
- ☐ : White cells are not enclosed. Please contact the sales person in charge.

VLS Series

VLS6045EX-H

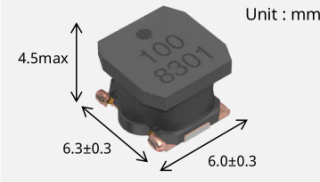
Wire Wound

In Mass Production

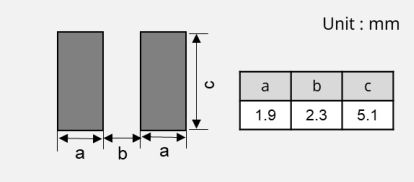
Features

- Package size is 6.6mm max.(L) X 6.3mm max.(W)
- VLS6045EX-H is available for High current
- VLS-EX series corresponds to RoHS.
- Operating temperature range from -40deg.C to 125deg.C
- (Self-rise temperature included)
- Compliant with AEC-Q200 Rev.D

Product image & Dimensions



Recommended Land pattern



Electrical Characteristics

*Listed items are part of the full lineup.

Part #	L at 100kHz [uH] +/- 20%	DCR max. [ohm]	DCR typ. [ohm]	Isat. max. [A]	Isat. typ. [A]	Itemp. typ. [A]
VLS6045EX-100M-H	10	0.0611	0.047	3.9	4.7	3.4
VLS6045EX-150M-H	15	0.0975	0.075	3.1	3.8	2.5
VLS6045EX-220M-H	22	0.1365	0.105	2.4	3.1	1.9
VLS6045EX-470M-H	47	0.299	0.23	1.8	2.1	1.3
VLS6045EX-680M-H	68	0.403	0.31	1.4	1.7	1.0
VLS6045EX-101M-H	100	0.611	0.47	1.1	1.5	0.9
VLS6045EX-151M-H	150	0.988	0.76	0.9	1.2	0.7

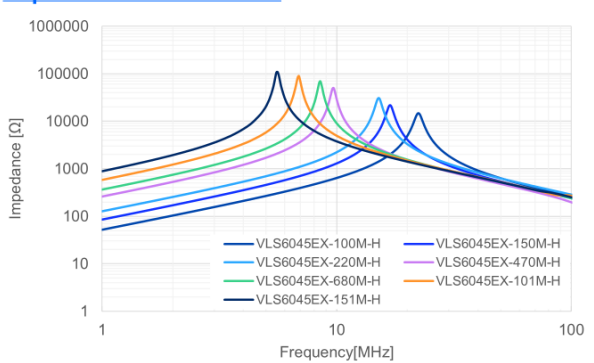
Isat : based on "the inductance change rate". (30% below the initial inductance value.)

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Temperature rise is highly dependent on many factors so it should be verified for application conditions.

Impedance Characteristics



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