PoC Sample Book —GMSL

TDK Corporation

Electronic Components Business Company

Magnetics Business Group

Aug. 21st, 2026

Notice

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

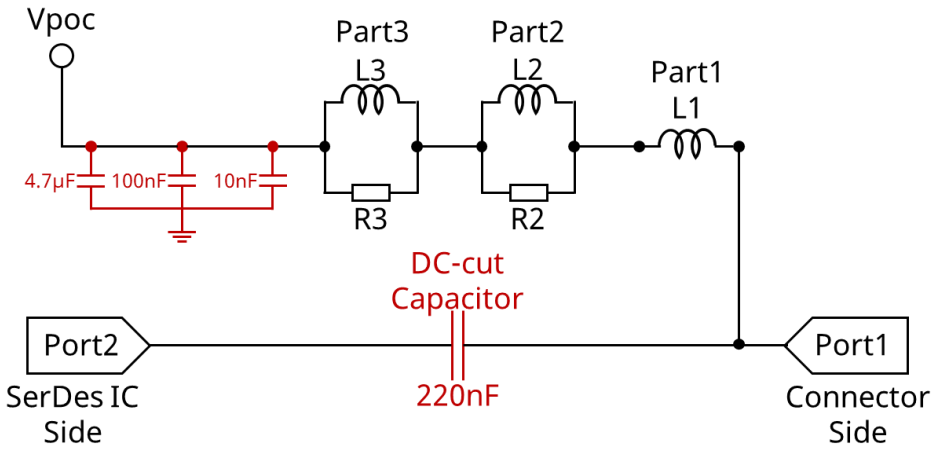
No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm^2]	Max Height [mm]
					L1	L2	R2	L3	R3			
1	GMSL1		200	105	MLZ1608CWC4R7MTD25	VLS3015CX-101M-H	1.5k	-	-	3194	10.78	1.50

- Please note that the allowable current values and ambient temperatures for PoC filters may vary depending on the actual operating environment.

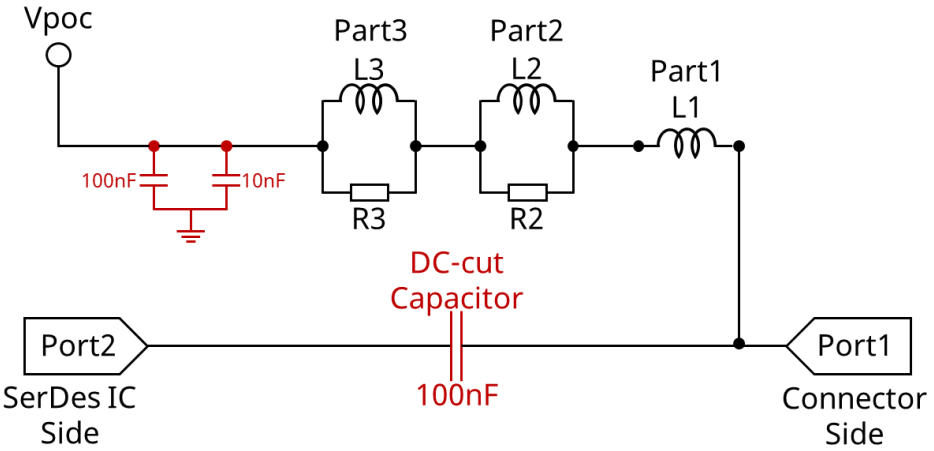
- Do not use the product beyond the conditions described in the datasheets attached to this sample book

Layout of PoC Filter

GMSL1



GMSL2 & 3

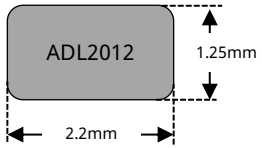
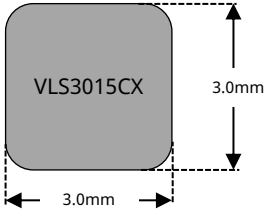
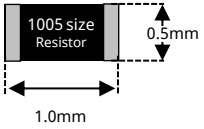


Notes:
Due to GMSL3 Channel Specification being more stringent than GMSL2, all GMSL3 PoC solutions are approved for GMSL2.

Explanation of the proposal table

Example of combinations :
ADL2012-2R2M-T01 + VLS3015CX-220M-H (1.0k)

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

	ADL2012-2R2M-T01	**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 = <u>1160</u> [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 = <u>12.25</u> [mm^2]

■ Max Height

The highest product height in the filter configuration.

1.75 or 1.50 ⇒ <u>1.75</u> [mm]

ADI / Maxim GMSL Series

TDK In Everything, Better

GMSL TDK Proposed Solutions : GMSL1, 1+2

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [°C]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
1	GMSL1		200	105	MLZ1608CWC4R7MTD25	VLS3015CX-101M-H	1.5k	-	-	3194	10.78	1.50
2	GMSL1		300	105	MLJ1005WGHR36PTD25	MLZ2012M2R2HTD25	1.0k	VLS4015CX-101M-H	1.5k	3468	20.00	1.50
3	GMSL1	✓	450	105	ADL2012-1R5M-T01	ADL3225VT-100M-TL000	1.0k	CLF6045NIT-101M-D	1.0k	744	49.55	4.80
4	GMSL1+2		200	105	MLJ1608WGCR56NTD25	MLZ1608CWC4R7MTD25	1.0k	VLS3015CX-101M-H	1.5k	3894	12.56	1.50
5	GMSL1+2		200	105	ADL2012-2R2M-T01	VLS3015CX-101M-H	1.5k	-	-	3044	12.25	1.75
6	GMSL1+2		300	105	MLJ1608WGCR56NTD25	MLZ2012M2R2HTD25	1.0k	VLS4015CX-101M-H	1.5k	3308	20.78	1.50
7	GMSL1+2		300	105	ADL2012-2R2M-T01	VLS4020CX-101M-H	1.5k	-	-	2540	19.25	2.00
8	GMSL1+2	✓	400	105	ADL2012-2R2M-T01	VLS5045EX-151M-H	1.0k	-	-	1449	29.75	4.50
9	GMSL1+2		400	105	MLJ1608WGCR56NTD25	MLZ2012M2R2HTD25	1.0k	VLS4020CX-101M-H	1.5k	2948	20.78	2.00
10	GMSL1+2	✓	500	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	VLS6045EX-151M-H	1.0k	1318	50.55	4.50
11	GMSL1+2		500	105	MLJ1608WGCR56NTD25	ADL3225VT-4R7M-TL000	1.0k	VLS5030EX-101M-D	1.5k	1760	36.78	3.00
12	GMSL1+2		600	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	VLS5030EX-101M-D	1.5k	1290	39.25	3.00
13	GMSL1+2		800	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	CLF7045NIT-101M-D	1.5k	642	64.55	4.80

Note: "GMSL1+2" means that it can be used with both 1 and 2.

GMSL TDK Proposed Solutions : GMSL2

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [°C]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
14	GMSL2		200	105	MLJ1608WGCR56NTD25	MLZ2012M4R7HTD25	1.0k	MLZ2012M100HTD25	1.0k	2026	7.28	1.45
15	GMSL2		300	105	MLJ1005WGHR47PTD25	ADL3225V-470MT-TL000	1.0k	-	-	2050	9.00	2.50
16	GMSL2		300	105	MLJ1005WGHR47PTD25	MLZ1608CDCR47MTD25	1.0k	VLS3015CZ-220M-HE	1.0k	2472	11.78	1.50
17	GMSL2	✓	300	105	ADL2012S-1R2M-T01	ADL3225VM-150M-TL001	1.5k	-	-	900	11.25	2.50
18	GMSL2	✓	300	105	MLJ1608WGCR56NTD25	ADL3225V-470MT-TL000	1.0k	-	-	1600	9.78	2.50
19	GMSL2		350	105	MLJ1608WGC1R2MTD25	VLS3015CZ-220M-HE	1.0k	-	-	1976	10.78	1.50
20	GMSL2	✓	400	105	ADL3225V-220MS-TL000	-	-	-	-	730	8.00	2.50
21	GMSL2	✓	400	105	ADL2012-2R2M-T01	VLS3015CX-220M-H	1.0k	-		1160	12.25	1.75
22	GMSL2	✓	500	105	ADL32VHC-180MF	-	-	-	-	890	8.00	2.50
23	GMSL2		500	105	ADL2012-1R5M-T01	VLS3015CZ-220M-HE	1.0k	-	-	986	12.25	1.75
24	GMSL2		500	105	MLJ1608WGCR56NTD25	MLZ2012M1R5HTD25	1.0k	VLS3015CZ-220M-HE	1.0k	1658	13.78	1.50
25	GMSL2	✓	500/400	105/125	MLJ1608WGCR56NTD25	ADL32VHC-220M	1.0k	-	-	1590	9.78	2.50

GMSL TDK Proposed Solutions : GMSL2

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [°C]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
26	GMSL2	✓	600	105	ADL2012-1R5M-T01	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
27	GMSL2	✓	600	105	ADL8030VA-220M	-	-	-	-	570	21.06	2.70
28	GMSL2	✓	600	125	ADL3225VM-2R2M-TL001	ADL3225VM-2R2M-TL001	1.5k	ADM32FSC-220M	1.5k	960	25.00	2.50
29	GMSL2	✓	800	105	ADL2012-R47M-T01	ADL4532VK-160M-TL000	1.0k	-	-	570	17.65	3.40
30	GMSL2		800	105	ADL2012-1R5M-T01	VLS4020CX-150M-H	1.0k	-	-	522	19.25	2.00
31	GMSL2	✓	1000/800	105/125	ADL3225VM-2R2M-TL001	ADL3225VM-2R2M-TL001	1.5k	VLS5030EX-220M-D	1.5k	576	43.50	3.00
32	GMSL2	✓	1500	105	ADL3225VF-R49M-TL000	ADL4532VK-3R0M-TL000	1.0k	FLP5535-220M-D	1.5k	445	53.10	3.80

GMSL TDK Proposed Solutions : GMSL3

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [°C]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
33	GMSL3		300	105	MLJ1608WGC1R2MTD25	VLS3015CZ-220M-HE	1.0k	-	-	1976	10.78	1.50
34	GMSL3	✓	300	105	MLJ1608WGCR56NTD25	ADL3225V-470MT-TL000	1.0k	-	-	1600	9.78	2.50
35	GMSL3	✓	400	105	ADL3225V-220MS-TL000	-	-	-	-	730	8.00	2.50
36	GMSL3	✓	400	105	ADL2012-2R2M-T01	VLS3015CX-220M-H	1.0k	-	-	1160	12.25	1.75
37	GMSL3	✓	500	105	MLJ1608WGCR56NTD25	ADL32VHC-220M	1.0k	-	-	1590	9.78	2.50
38	GMSL3	✓	500	105	ADL32VHC-180MF	-	-	-	-	890	8.00	2.50
39	GMSL3		500	105	ADL2012-1R5M-T01	VLS3015CZ-220M-HE	1.0k	-	-	986	12.25	1.75
40	GMSL3	✓	600	105	ADL8030VA-220M	-	-	-	-	570	21.06	2.70
41	GMSL3	✓	600	105	ADL2012-1R5M-T01	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
42	GMSL3	✓	800	105	ADL3225VF-2R0M-TL000	ADL4532VK-160M-TL000	1.0k	-	-	650	22.90	3.40
43	GMSL3	✓	1200	105	ADL3225VF-2R0M-TL000	TFM201210ALMA1R5MTAA	1.5k	VLS5030EX-220M-D	1.5k	526	38.00	3.00
44	GMSL3	✓	1500	105	ADL3225VF-R49M-TL000	ADL4532VK-3R0M-TL000	1.0k	FLP5535-220M-D	1.5k	445	53.10	3.80

Notes: Due to GMSL3 Channel Specification being more stringent than GMSL2, all GMSL3 PoC solutions are approved for GMSL2.

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

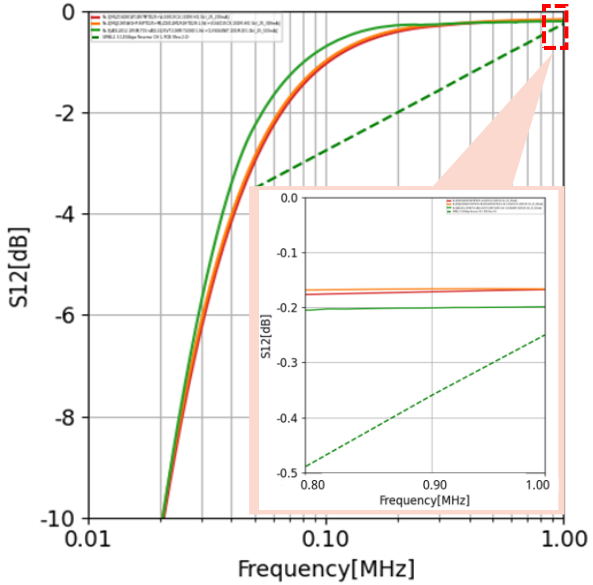
GMSL1

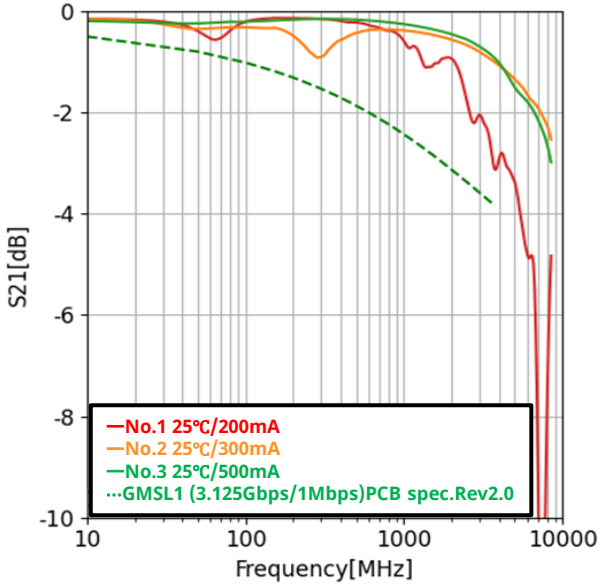
Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [°C]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
1	GMSL1		200	105	MLZ1608CWC4R7MTD25	VLS3015CX-101M-H	1.5k	-	-	3194	10.78	1.50
2	GMSL1		300	105	MLJ1005WGHR36PTD25	MLZ2012M2R2HTD25	1.0k	VLS4015CX-101M-H	1.5k	3468	20.00	1.50
3	GMSL1	✓	450	105	ADL2012-1R5M-T01	ADL3225VT-100M-TL000	1.0k	CLF6045NIT-101M-D	1.0k	744	49.55	4.80

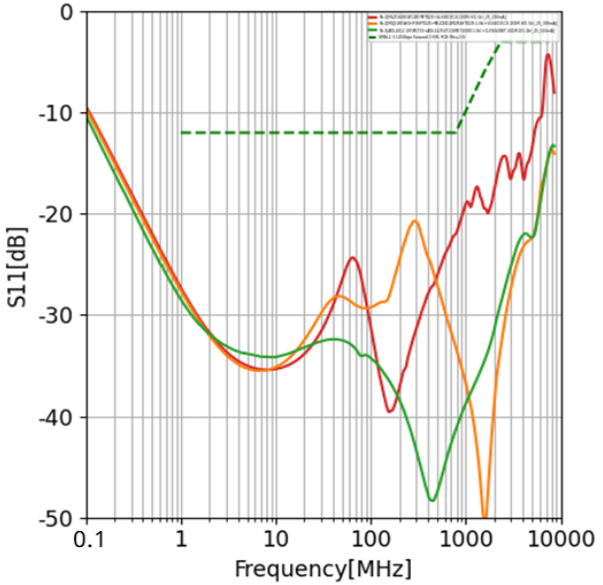
*For No. 3, the simulation was run at 500 mA.

Insertion Loss





Return Loss



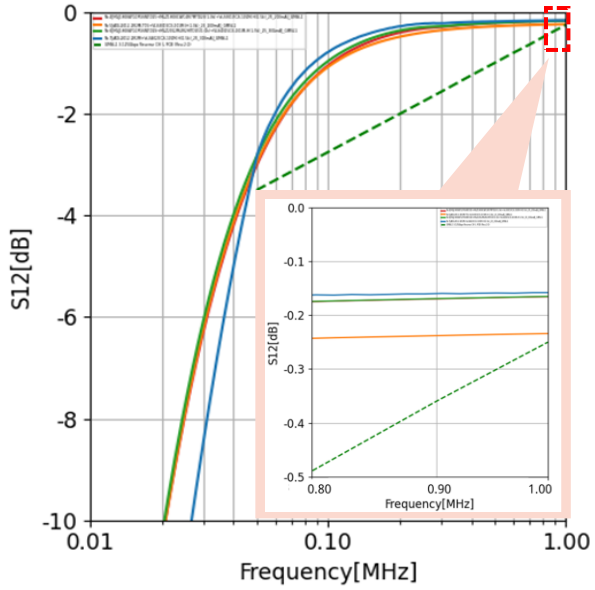
GMSL1+2: 200mA~300mA (Limit Line GMSL1)

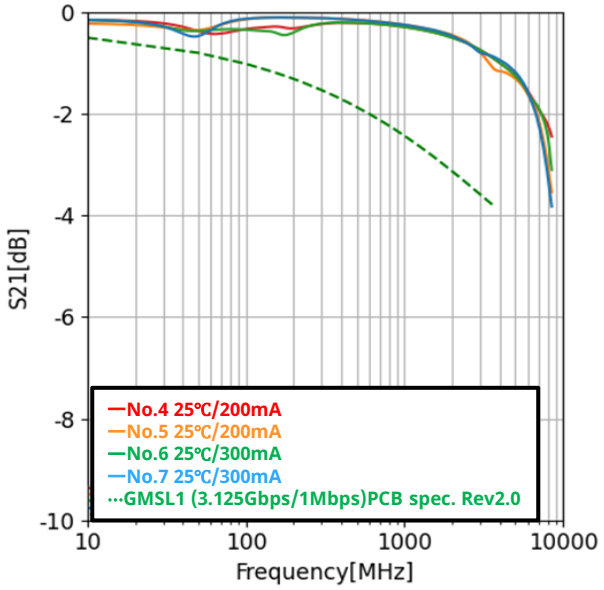
Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [°C]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
4	GMSL1+2		200	105	MLJ1608WGCR56NTD25	MLZ1608CWC4R7MTD25	1.0k	VLS3015CX-101M-H	1.5k	3894	12.56	1.50
5	GMSL1+2		200	105	ADL2012-2R2M-T01	VLS3015CX-101M-H	1.5k	-	-	3044	12.25	1.75
6	GMSL1+2		300	105	MLJ1608WGCR56NTD25	MLZ2012M2R2HTD25	1.0k	VLS4015CX-101M-H	1.5k	3308	20.78	1.50
7	GMSL1+2		300	105	ADL2012-2R2M-T01	VLS4020CX-101M-H	1.5k	-	-	2540	19.25	2.00

Note: "GMSL1+2" means that it can be used with both 1 and 2.

Insertion Loss





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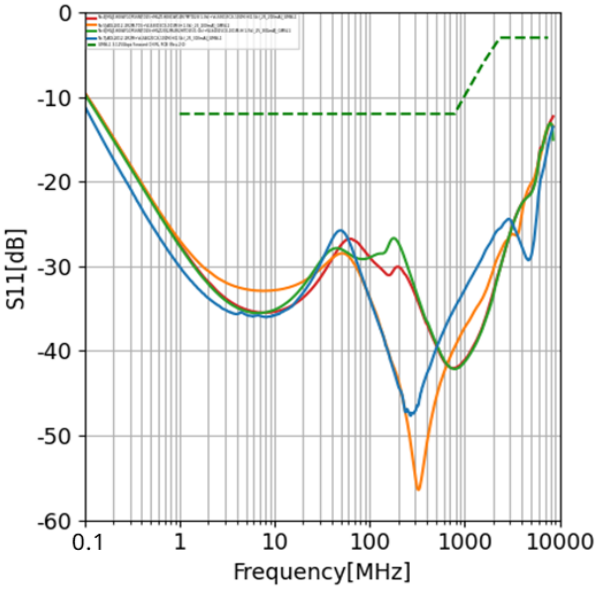


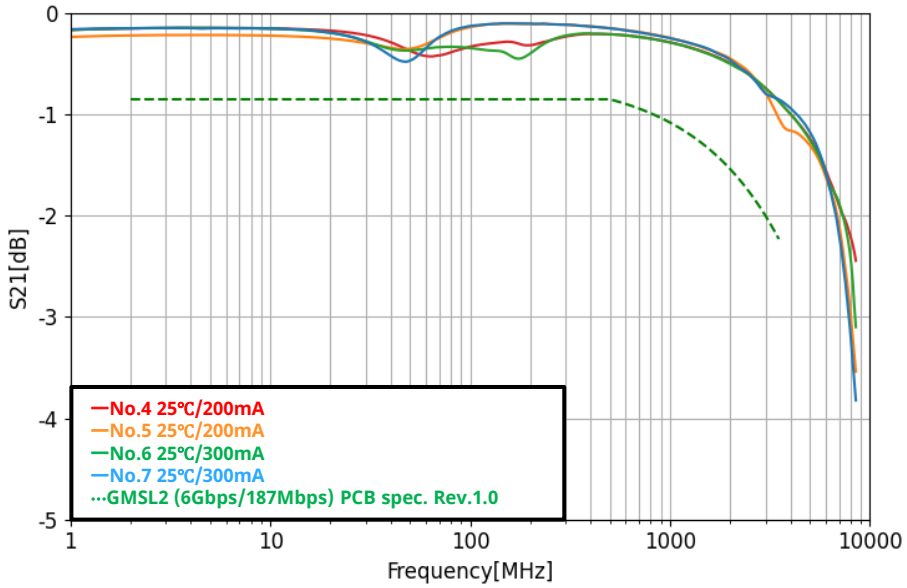
GMSL1+2: 200mA~300mA (Limit Line GMSL2)

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
4	GMSL1+2		200	105	MLJ1608WGCR56NTD25	MLZ1608CWC4R7MTD25	1.0k	VLS3015CX-101M-H	1.5k	3894	12.56	1.50
5	GMSL1+2		200	105	ADL2012-2R2M-T01	VLS3015CX-101M-H	1.5k	-	-	3044	12.25	1.75
6	GMSL1+2		300	105	MLJ1608WGCR56NTD25	MLZ2012M2R2HTD25	1.0k	VLS4015CX-101M-H	1.5k	3308	20.78	1.50
7	GMSL1+2		300	105	ADL2012-2R2M-T01	VLS4020CX-101M-H	1.5k	-	-	2540	19.25	2.00

Note: "GMSL1+2" means that it can be used with both 1 and 2.

Insertion Loss



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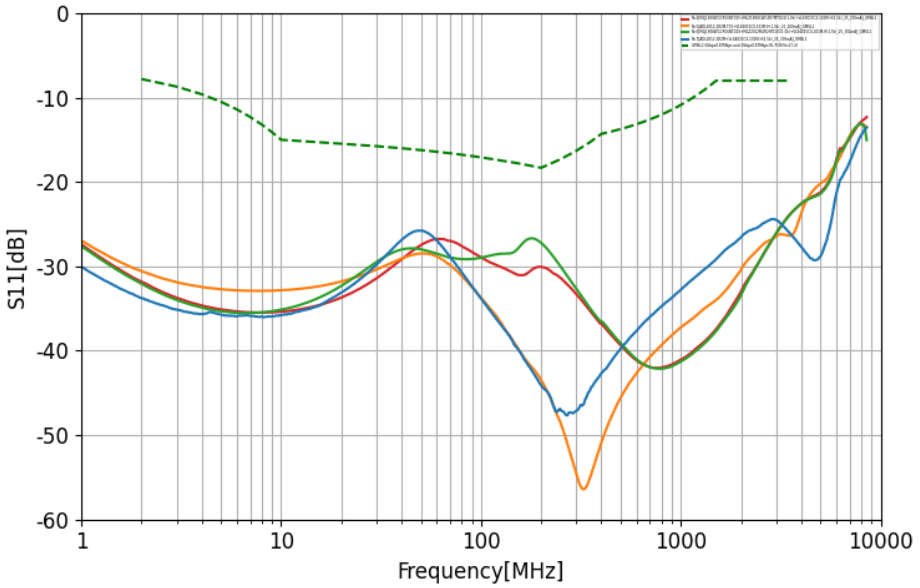
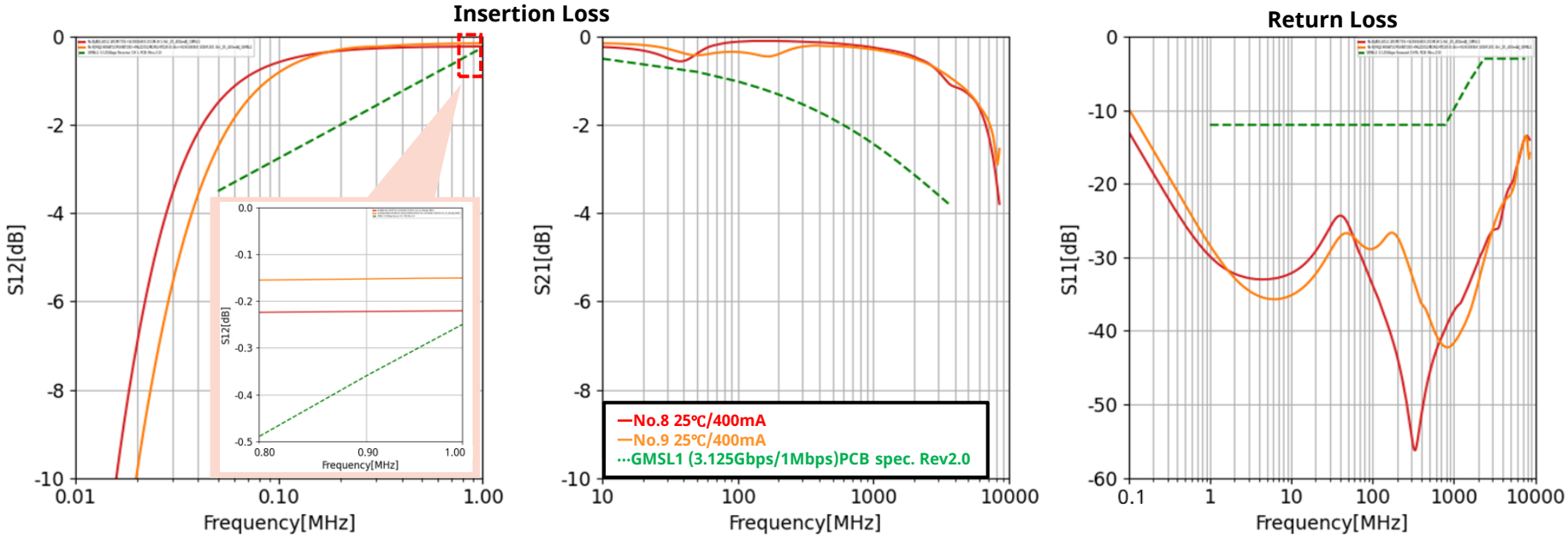


GMSL1+2: 400mA (Limit Line GMSL1)

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
8	GMSL1+2	✓	400	105	ADL2012-2R2M-T01	VLS5045EX-151M-H	1.0k	-	-	1449	29.75	4.50
9	GMSL1+2		400	105	MLJ1608WGCR56NTD25	MLZ2012M2R2HTD25	1.0k	VLS4020CX-101M-H	1.5k	2948	20.78	2.00

Note: "GMSL1+2" means that it can be used with both 1 and 2.



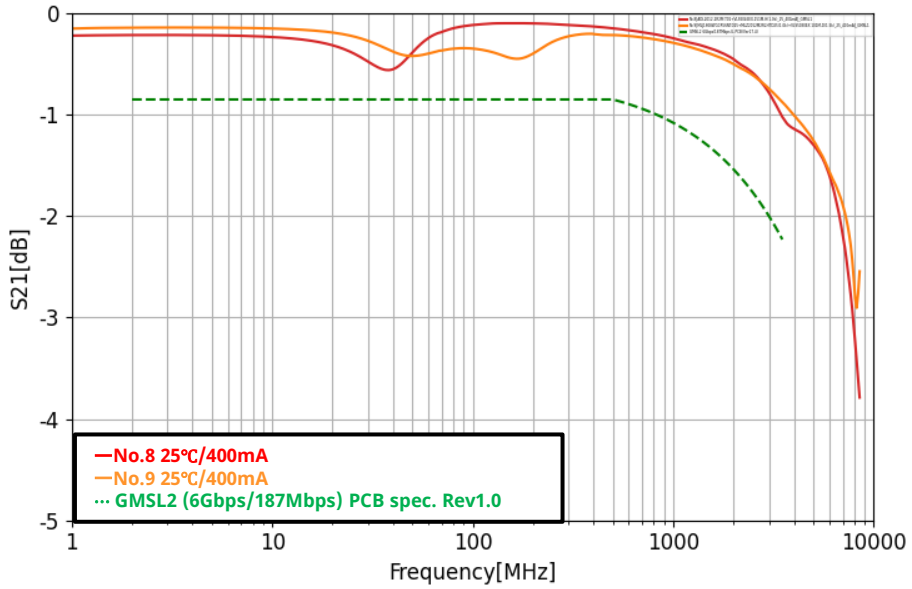
GMSL1+2: 400mA (Limit Line GMSL2)

Reference approval granted

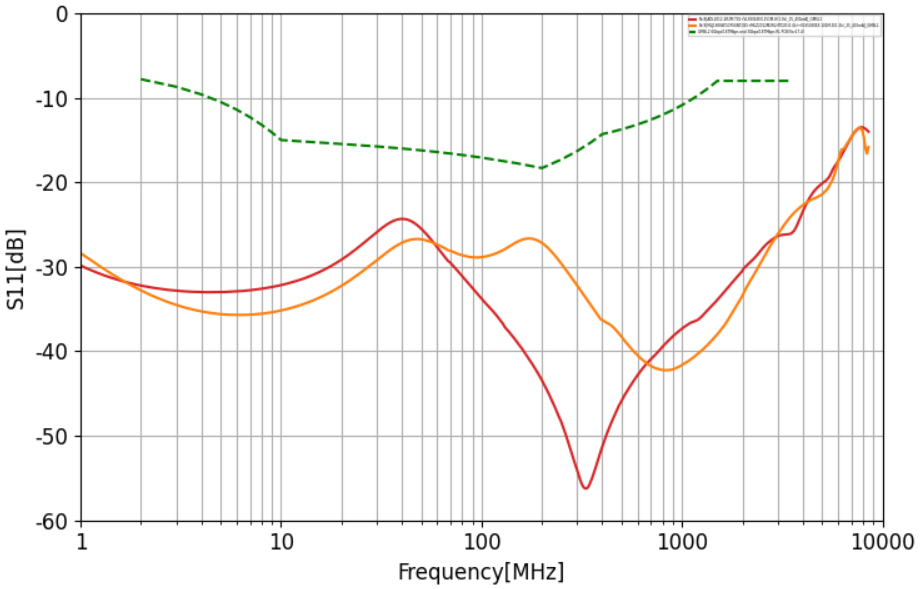
No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
8	GMSL1+2	✓	400	105	ADL2012-2R2M-T01	VLS5045EX-151M-H	1.0k	-	-	1449	29.75	4.50
9	GMSL1+2		400	105	MLJ1608WGCR56NTD25	MLZ2012M2R2HTD25	1.0k	VLS4020CX-101M-H	1.5k	2948	20.78	2.00

Note: "GMSL1+2" means that it can be used with both 1 and 2.

Insertion Loss



Return Loss



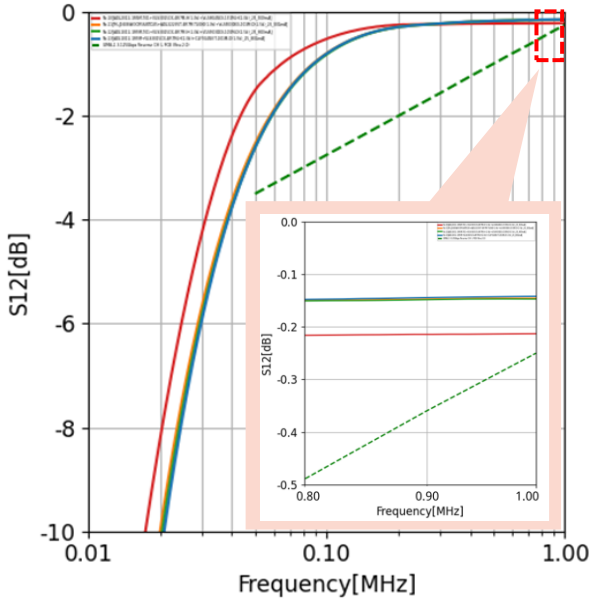
GMSL1+2: 500mA~800mA (Limit Line GMSL1)

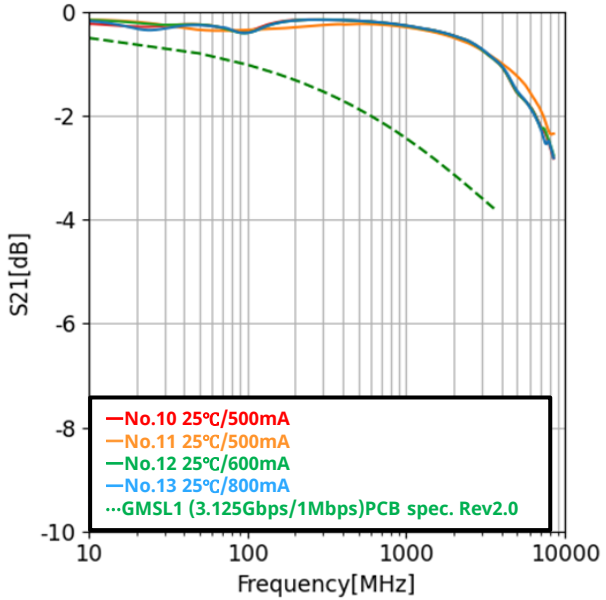
Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
10	GMSL1+2	✓	500	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	VLS6045EX-151M-H	1.0k	1318	50.55	4.50
11	GMSL1+2		500	105	MLJ1608WGCR56NTD25	ADL3225VT-4R7M-TL000	1.0k	VLS5030EX-101M-D	1.5k	1760	36.78	3.00
12	GMSL1+2		600	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	VLS5030EX-101M-D	1.5k	1290	39.25	3.00
13	GMSL1+2		800	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	CLF7045NIT-101M-D	1.5k	642	64.55	4.80

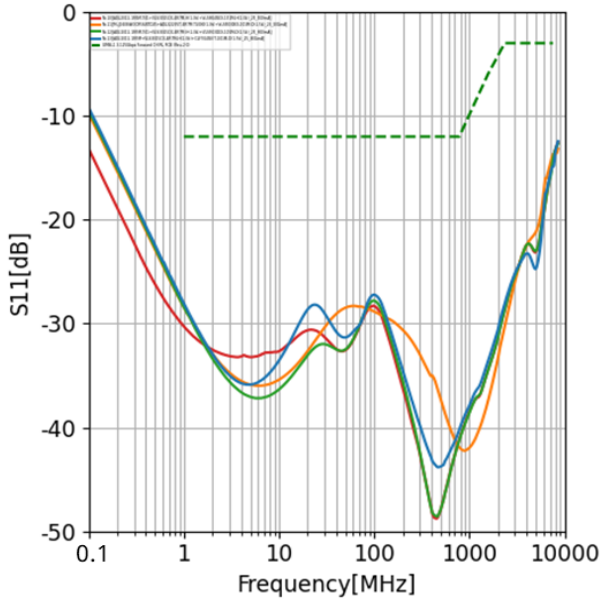
Note: "GMSL1+2" means that it can be used with both 1 and 2.

Insertion Loss





Return Loss



TDK In Everything, Better

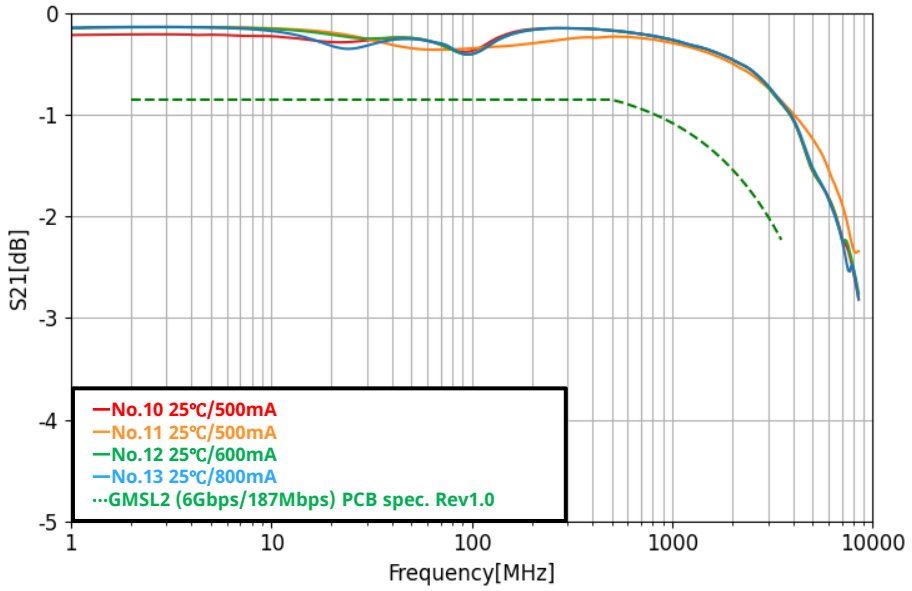
GMSL1+2: 500mA~800mA (Limit Line GMSL2)

Reference approval granted

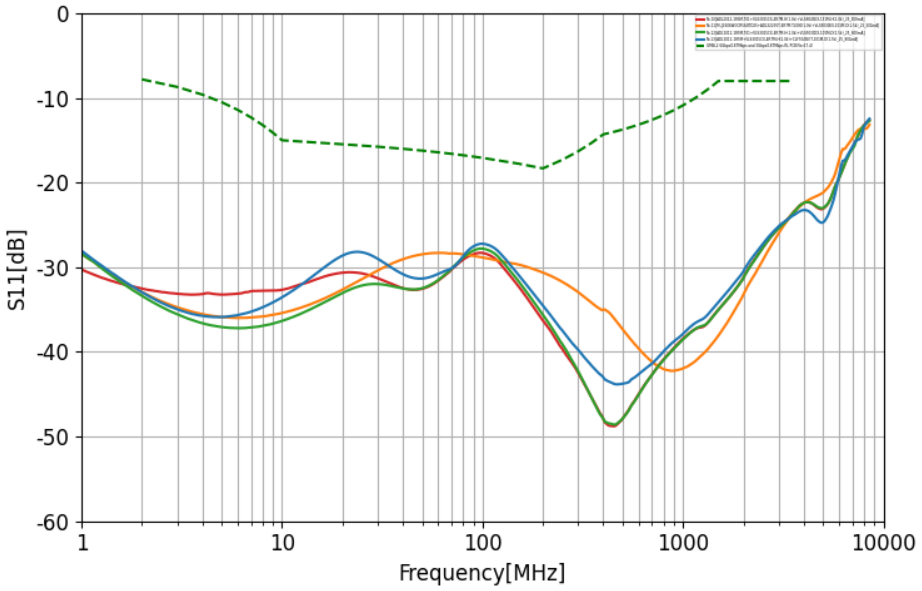
No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [°C]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
10	GMSL1+2	✓	500	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	VLS6045EX-151M-H	1.0k	1318	50.55	4.50
11	GMSL1+2		500	105	MLJ1608WGCR56NTD25	ADL3225VT-4R7M-TL000	1.0k	VLS5030EX-101M-D	1.5k	1760	36.78	3.00
12	GMSL1+2		600	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	VLS5030EX-101M-D	1.5k	1290	39.25	3.00
13	GMSL1+2		800	105	ADL2012-1R5M-T01	VLS3015CX-4R7M-H	1.0k	CLF7045NIT-101M-D	1.5k	642	64.55	4.80

Note: "GMSL1+2" means that it can be used with both 1 and 2.

Insertion Loss



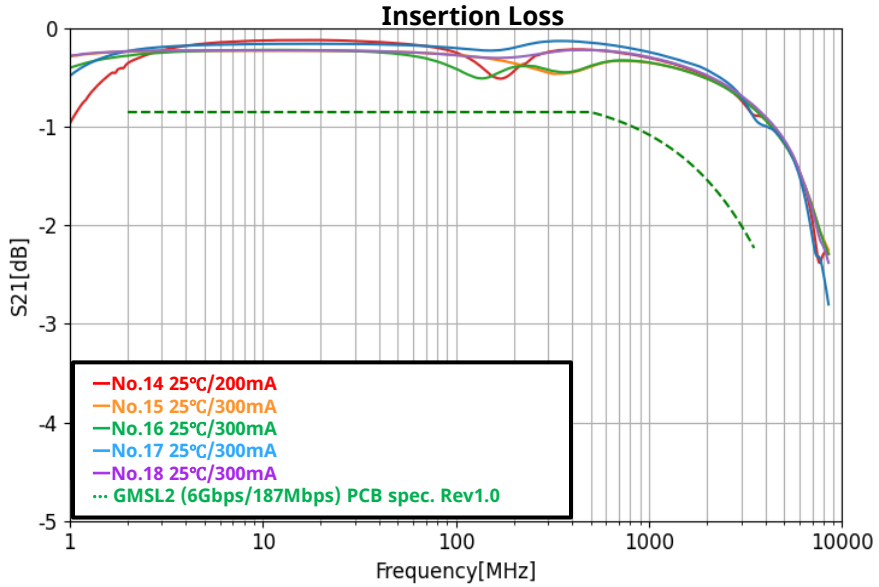
Return Loss

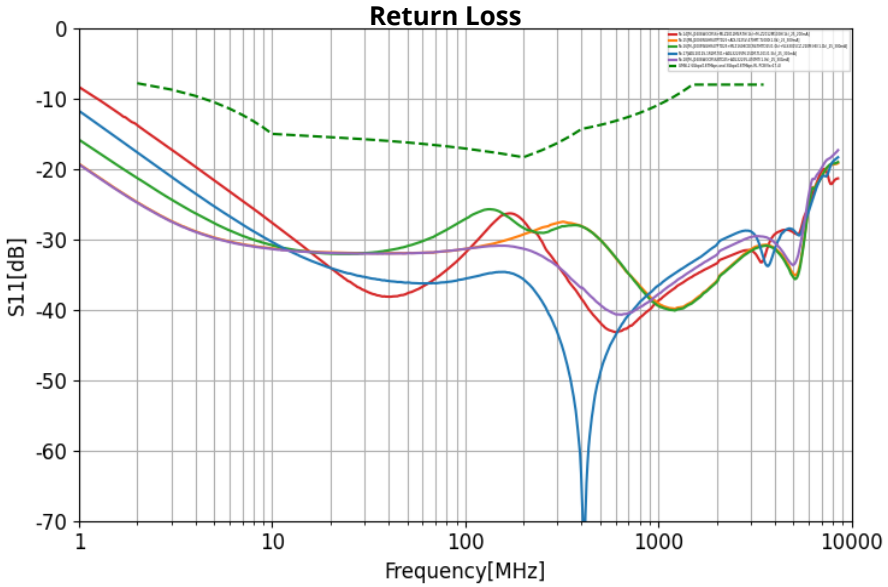


GMSL2: 200mA~300mA

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
14	GMSL2		200	105	MLJ1608WGCR56NTD25	MLZ2012M4R7HTD25	1.0k	MLZ2012M100HTD25	1.0k	2026	7.28	1.45
15	GMSL2		300	105	MLJ1005WGHR47PTD25	ADL3225V-470MT-TL000	1.0k	-	-	2050	9.00	2.50
16	GMSL2		300	105	MLJ1005WGHR47PTD25	MLZ1608CDCR47MTD25	1.0k	VLS3015CZ-220M-HE	1.0k	2472	11.78	1.50
17	GMSL2	✓	300	105	ADL2012S-1R2M-T01	ADL3225VM-150M-TL001	1.5k	-	-	900	11.25	2.50
18	GMSL2	✓	300	105	MLJ1608WGCR56NTD25	ADL3225V-470MT-TL000	1.0k	-	-	1600	9.78	2.50



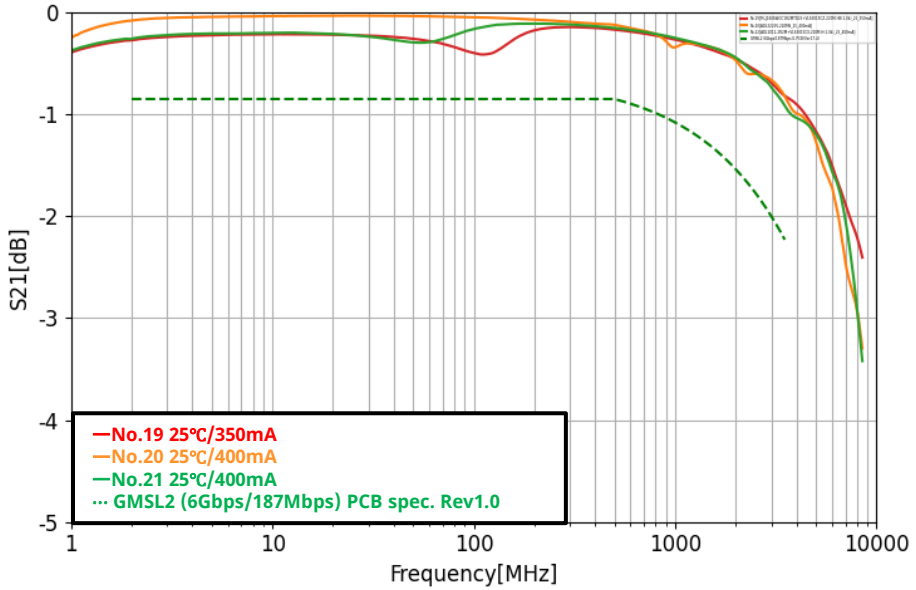


GMSL2: 350mA~400mA

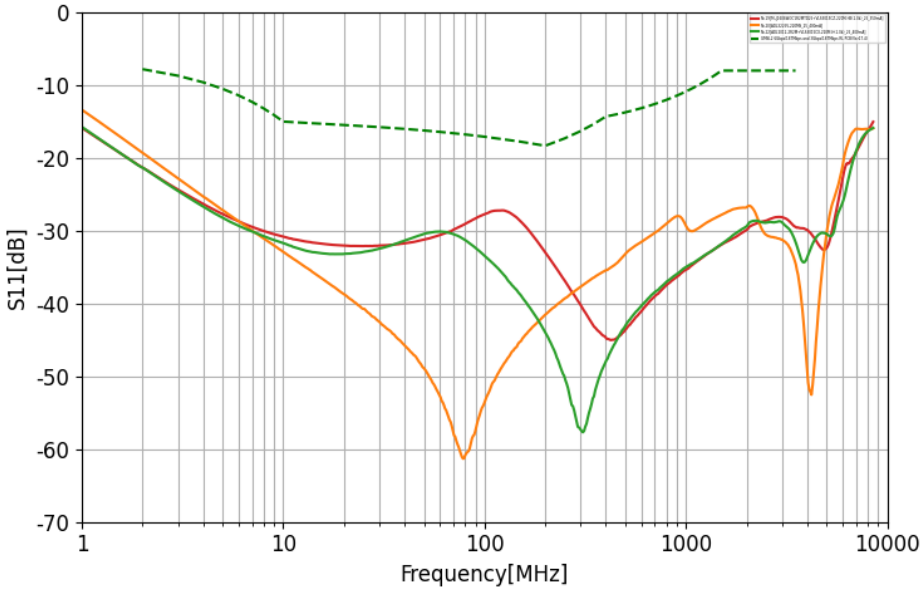
Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
19	GMSL2		350	105	MLJ1608WGC1R2MTD25	VLS3015CZ-220M-HE	1.0k	-	-	1976	10.78	1.50
20	GMSL2	✓	400	105	ADL3225V-220MS-TL000	-	-	-	-	730	8.00	2.50
21	GMSL2	✓	400	105	ADL2012-2R2M-T01	VLS3015CX-220M-H	1.0k	-		1160	12.25	1.75

Insertion Loss



Return Loss

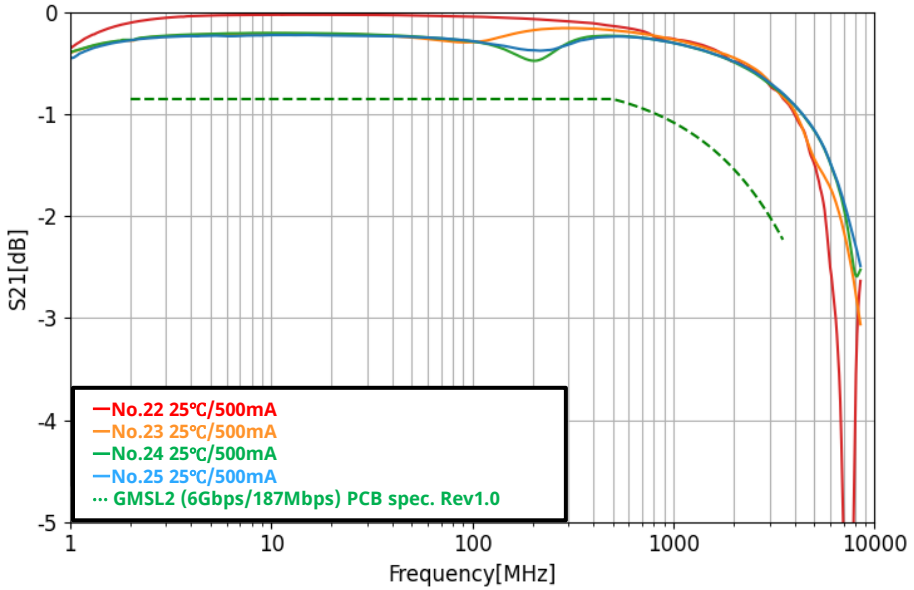


GMSL2: 500mA

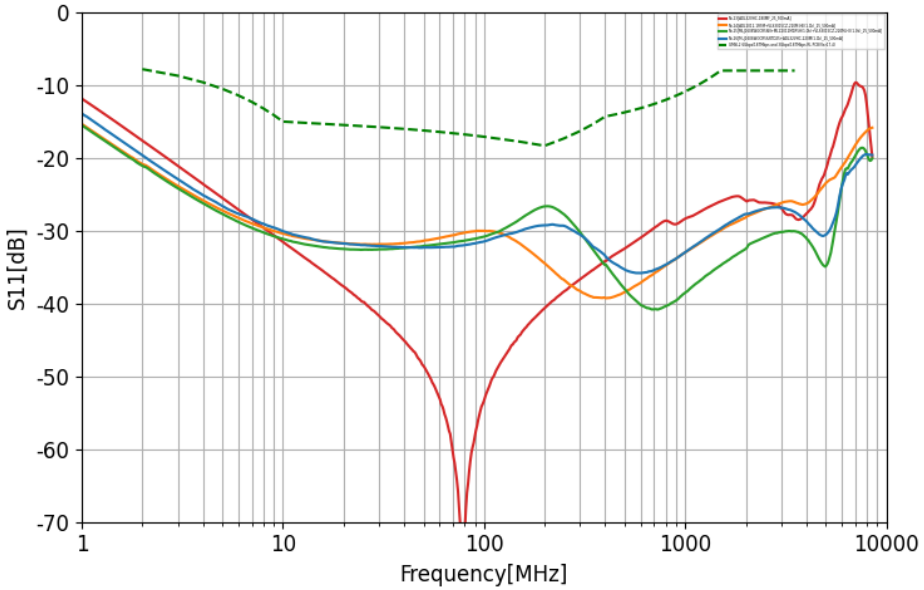
Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
22	GMSL2	✓	500	105	ADL32VHC-180MF	-	-	-	-	890	8.00	2.50
23	GMSL2		500	105	ADL2012-1R5M-T01	VLS3015CZ-220M-HE	1.0k	-	-	986	12.25	1.75
24	GMSL2		500	105	MLJ1608WGCR56NTD25	MLZ2012M1R5HTD25	1.0k	VLS3015CZ-220M-HE	1.0k	1658	13.78	1.50
25	GMSL2	✓	500/400	105/125	MLJ1608WGCR56NTD25	ADL32VHC-220M	1.0k	-	-	1590	9.78	2.50

Insertion Loss



Return Loss

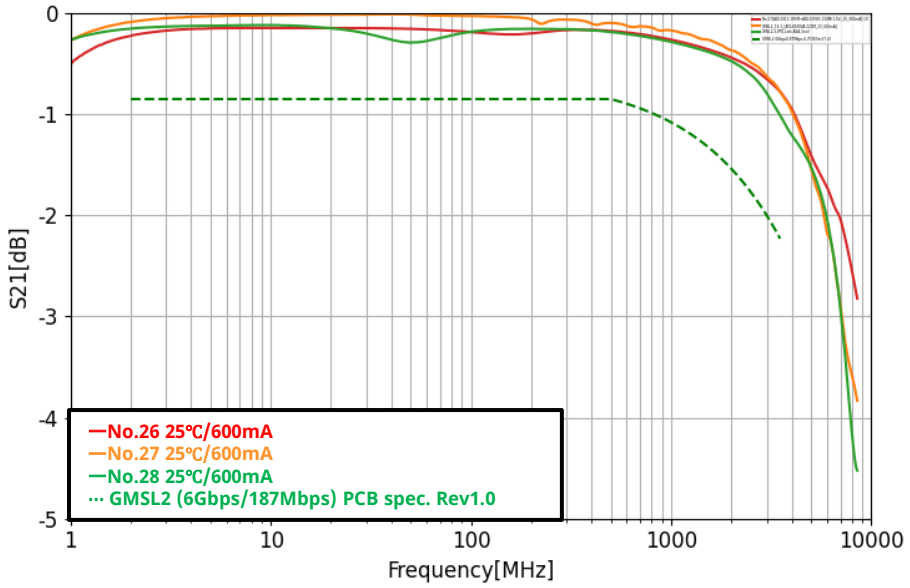


GMSL2: 600mA

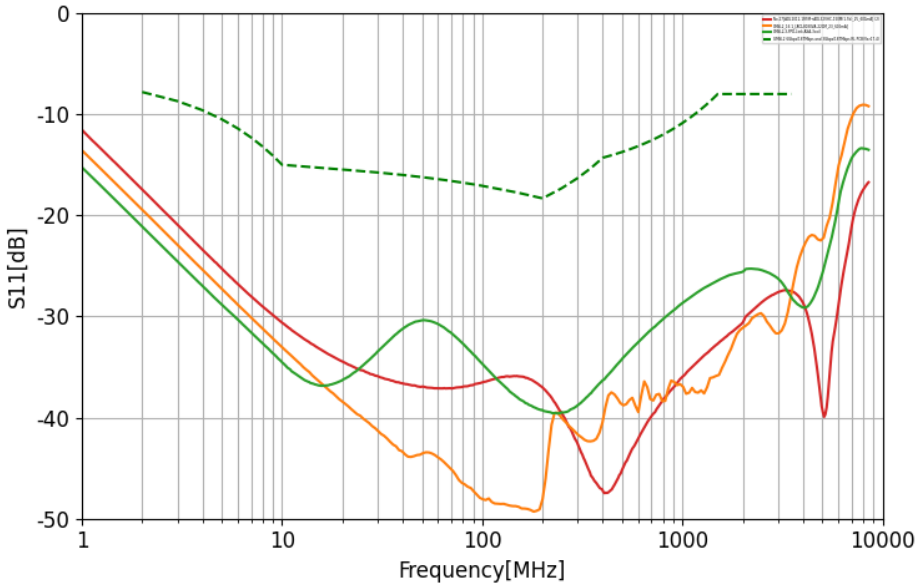
Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
26	GMSL2	✓	600	105	ADL2012-1R5M-T01	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
27	GMSL2	✓	600	105	ADL8030VA-220M	-	-	-	-	570	21.06	2.70
28	GMSL2	✓	600	125	ADL3225VM-2R2M-TL001	ADL3225VM-2R2M-TL001	1.5k	ADM32FSC-220M	1.5k	960	25.00	2.50

Insertion Loss



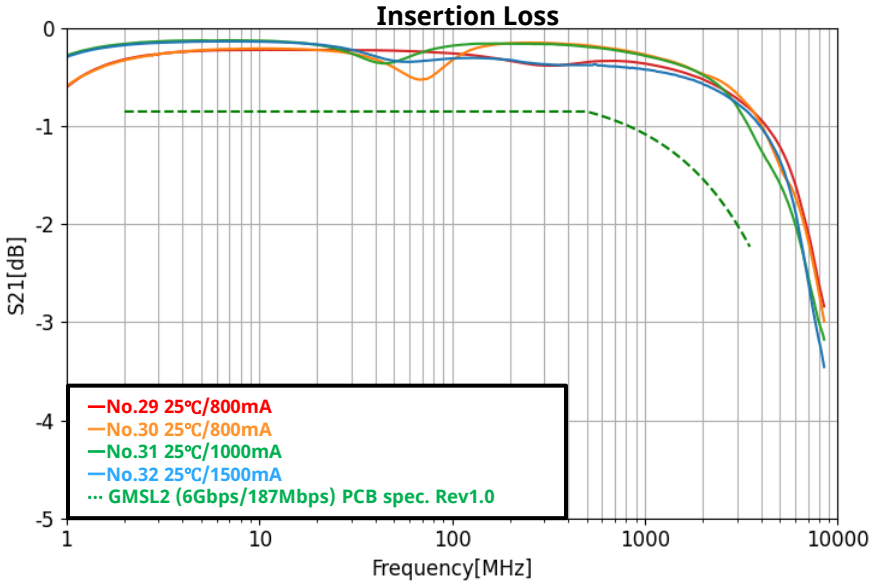
Return Loss

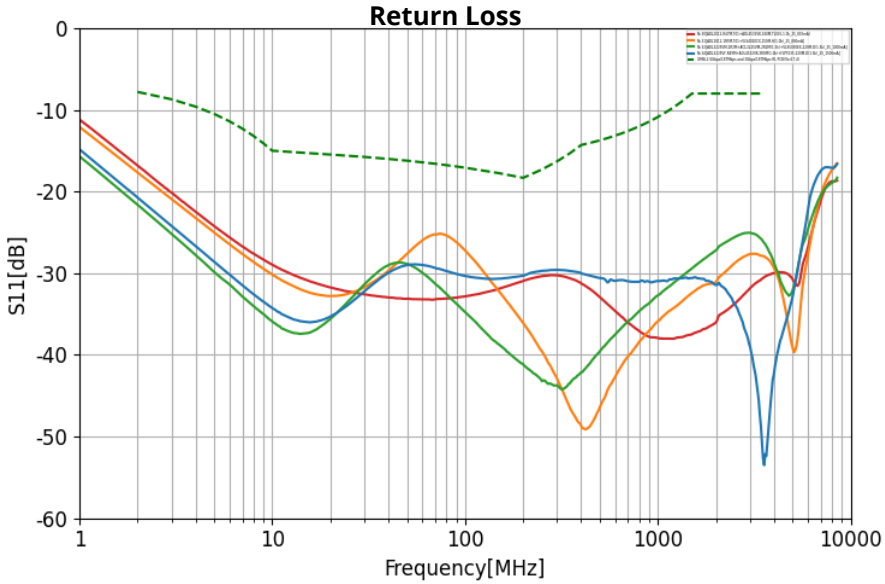


GMSL2: 800~1500mA

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
29	GMSL2	✓	800	105	ADL2012-R47M-T01	ADL4532VK-160M-TL000	1.0k	-	-	570	17.65	3.40
30	GMSL2		800	105	ADL2012-1R5M-T01	VLS4020CX-150M-H	1.0k	-	-	522	19.25	2.00
31	GMSL2	✓	1000/800	105/125	ADL3225VM-2R2M-TL001	ADL3225VM-2R2M-TL001	1.5k	VLS5030EX-220M-D	1.5k	576	43.50	3.00
32	GMSL2	✓	1500	105	ADL3225VF-R49M-TL000	ADL4532VK-3R0M-TL000	1.0k	FLP5535-220M-D	1.5k	445	53.10	3.80

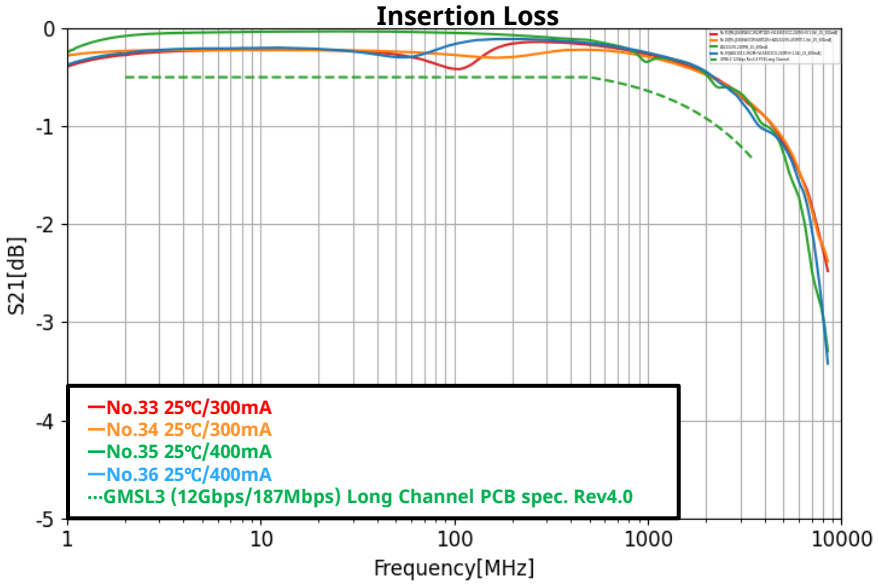


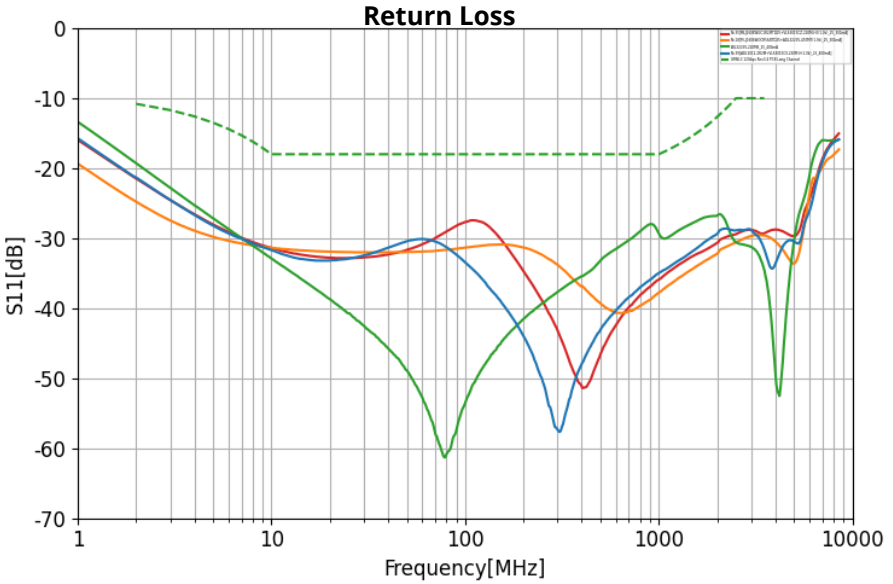


GMSL3: 300~400mA

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm^2]	Max Height [mm]
					L1	L2	R2	L3	R3			
33	GMSL3		300	105	MLJ1608WGC1R2MTD25	VLS3015CZ-220M-HE	1.0k	-	-	1976	10.78	1.50
34	GMSL3	✓	300	105	MLJ1608WGCR56NTD25	ADL3225V-470MT-TL000	1.0k	-	-	1600	9.78	2.50
35	GMSL3	✓	400	105	ADL3225V-220MS-TL000	-	-	-	-	730	8.00	2.50
36	GMSL3	✓	400	105	ADL2012-2R2M-T01	VLS3015CX-220M-H	1.0k	-	-	1160	12.25	1.75



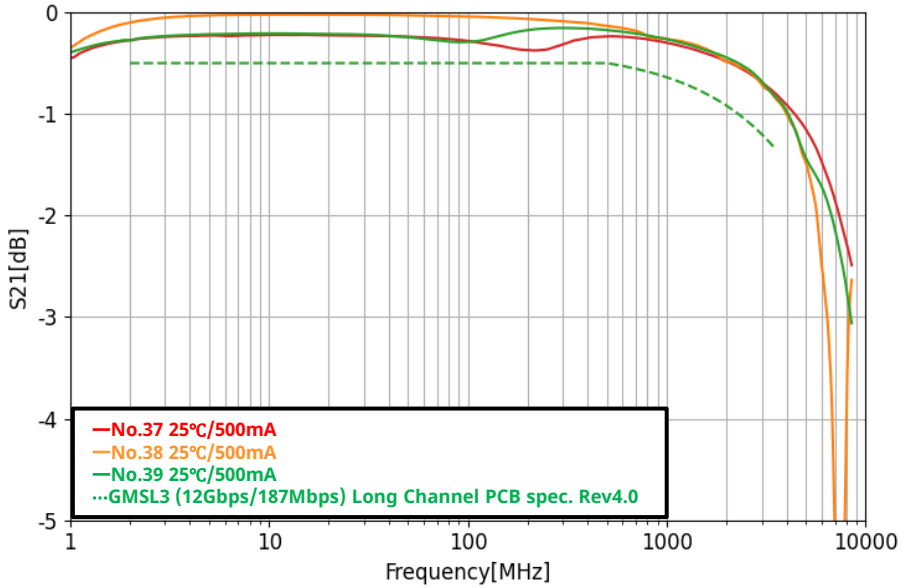


GMSL3: 500mA

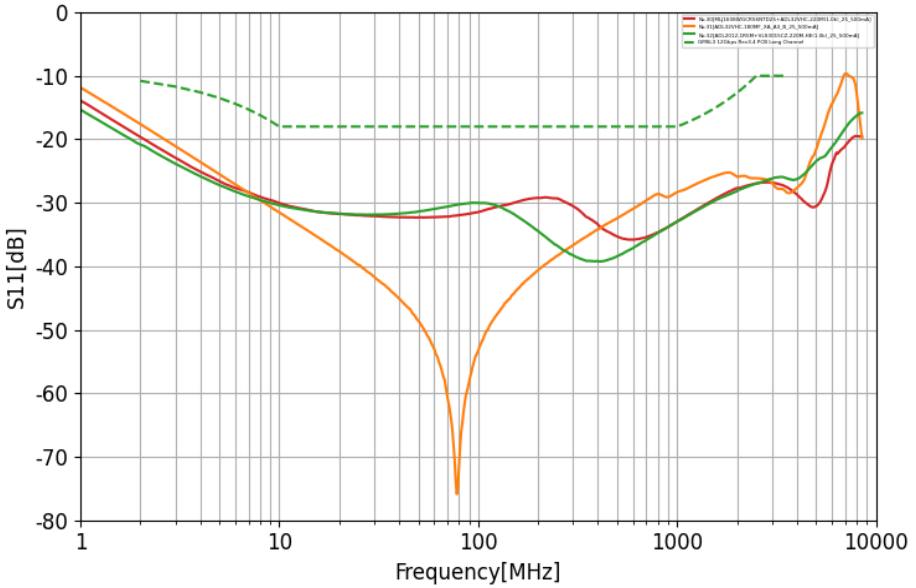
Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm^2]	Max Height [mm]
					L1	L2	R2	L3	R3			
37	GMSL3	✓	500	105	MLJ1608WGCR56NTD25	ADL32VHC-220M	1.0k	-	-	1590	9.78	2.50
38	GMSL3	✓	500	105	ADL32VHC-180MF	-	-	-	-	890	8.00	2.50
39	GMSL3		500	105	ADL2012-1R5M-T01	VLS3015CZ-220M-HE	1.0k	-	-	986	12.25	1.75

Insertion Loss



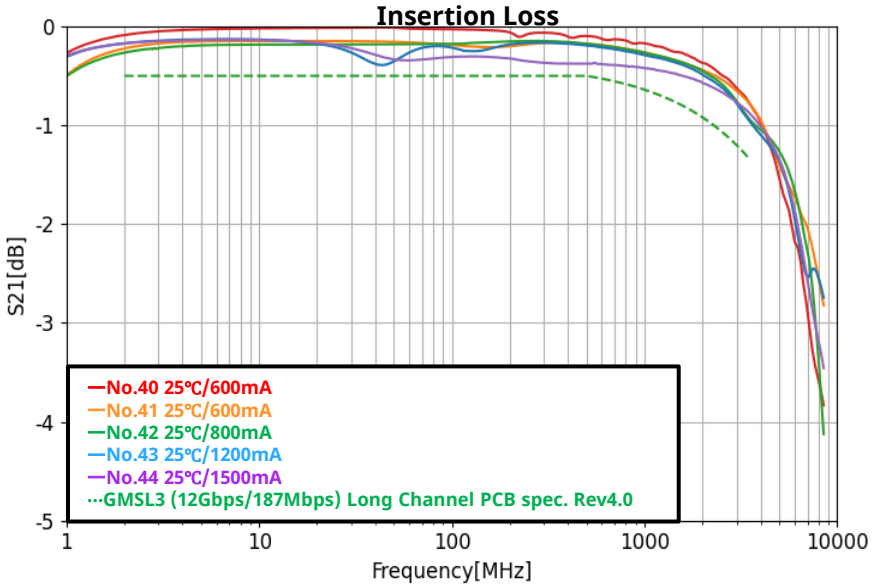
Return Loss

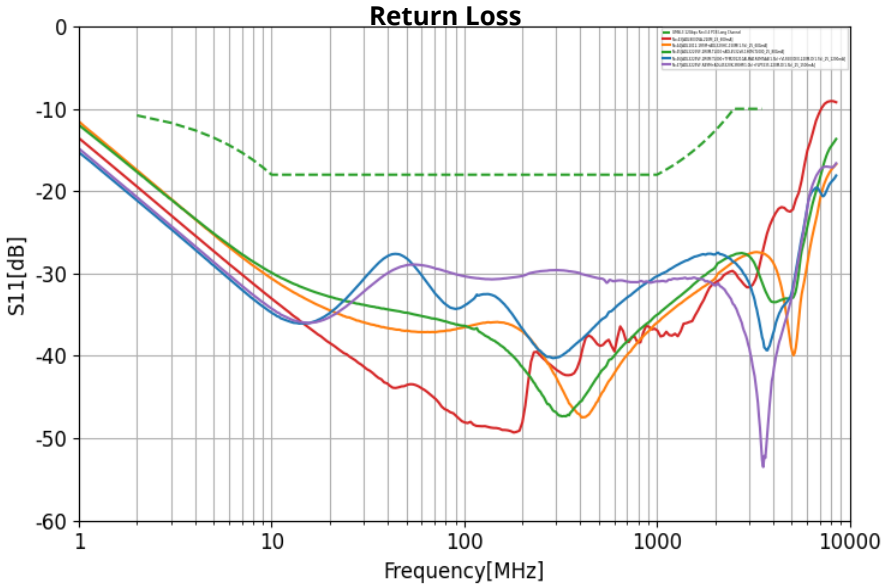


GMSL3: 600mA~1200mA

Reference approval granted

No.	Criteria	Ref.	Max bias current [mA]	Ambi. temp. [℃]	Part1	Part2		Part3		Total Rdc (Max) [mΩ]	Product Area [mm²]	Max Height [mm]
					L1	L2	R2	L3	R3			
40	GMSL3	✓	600	105	ADL8030VA-220M	-	-	-	-	570	21.06	2.70
41	GMSL3	✓	600	105	ADL2012-1R5M-T01	ADL32VHC-150M	1.5k	-	-	840	11.25	2.50
42	GMSL3	✓	800	105	ADL3225VF-2R0M-TL000	ADL4532VK-160M-TL000	1.0k	-	-	650	22.90	3.40
43	GMSL3	✓	1200	105	ADL3225VF-2R0M-TL000	TFM201210ALMA1R5MTAA	1.5k	VLS5030EX-220M-D	1.5k	526	38.00	3.00
44	GMSL3	✓	1500	105	ADL3225VF-R49M-TL000	ADL4532VK-3R0M-TL000	1.0k	FLP5535-220M-D	1.5k	445	53.10	3.80





Products Information

ADL Series

ADL2012 (for High Frequency) Wire Wound

In Mass Production

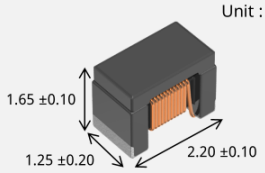
Datasheet PDF

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

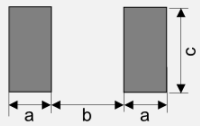
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



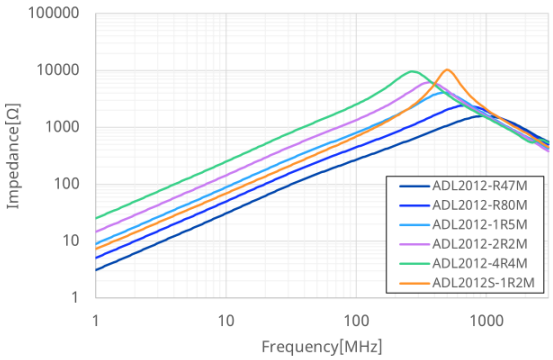
a	b	c
0.7	1.3	1.5

Electrical Characteristics

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	SRF typ. [MHz]	Isat. typ. [mA]	Itemp. typ. [mA] Ambient temp. [°C]		
					85	105	125
ADL2012-R47M-T01	0.47	0.10	1000	–	–	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
ADL2012-4R4M-T01	4.4	0.9	260	650	455	350	200
ADL2012S-1R2M-T01	1.2	0.50	500	–	700	550	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.)
*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

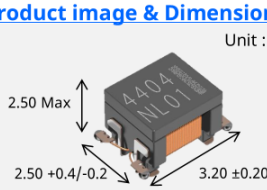
Datasheet PDF

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

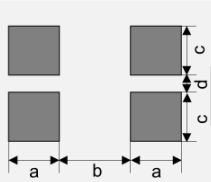
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



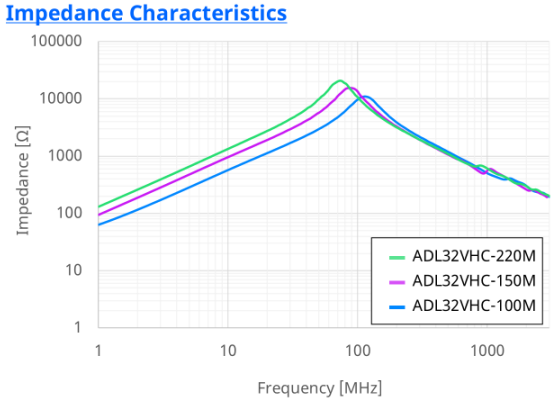
a	b	c	d
1.20	1.70	1.15	0.40

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-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

Datasheet PDF

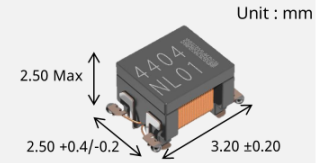
In Mass Production

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

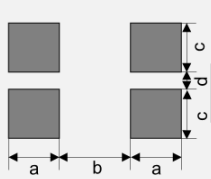
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



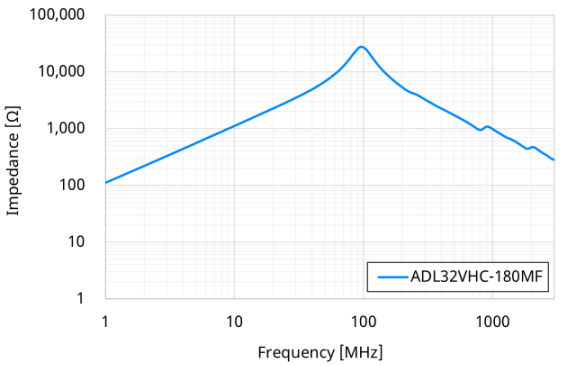
a	b	c	d
1.20	1.70	1.15	0.40

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

Datasheet PDF

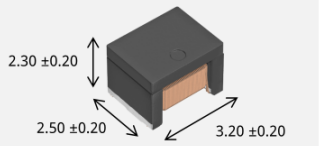
In Mass Production

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

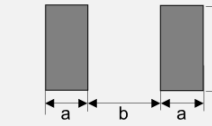
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



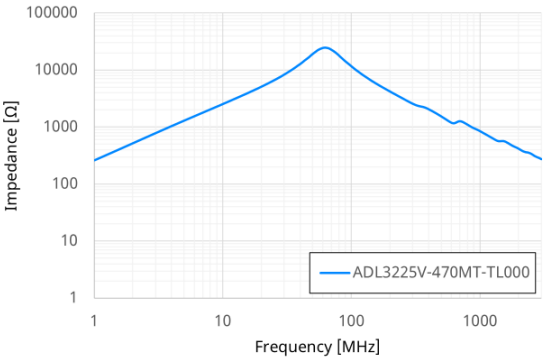
a	b	c
0.9	2.2	2.5

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

Datasheet PDF

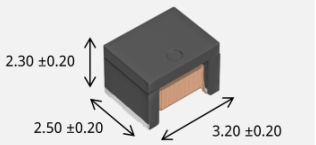
In Mass Production

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

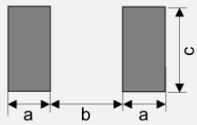
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



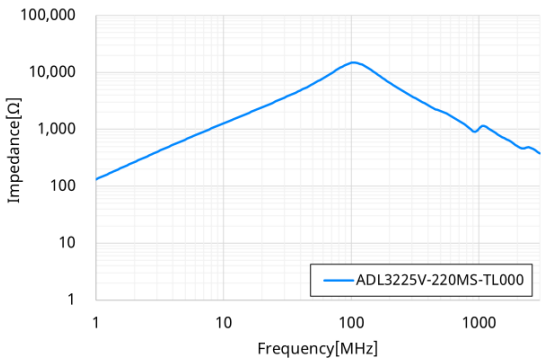
a	b	c
0.8	2.4	2.5

Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]	
			Ambient temp. [deg.C]		
			25	105	125
ADL3225V-220MS-TL000	22	0.73	490	520	300

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

ADL3225VF (for High Current) Wire Wound

Datasheet PDF

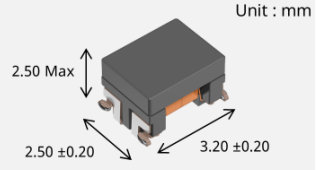
In Mass Production

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

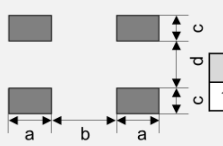
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



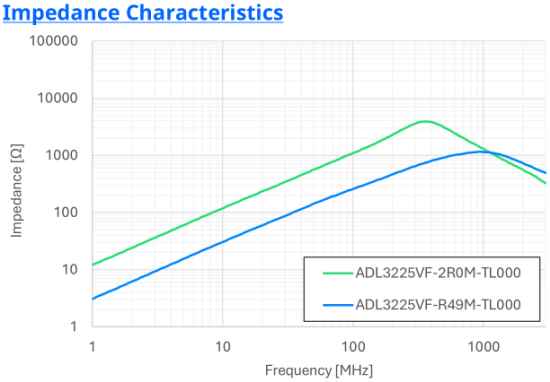
a	b	c	d
1.05	2.00	0.60	0.40

Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]	
			Ambient temp. [°C]		
			25	105	125
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.

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

Datasheet PDF

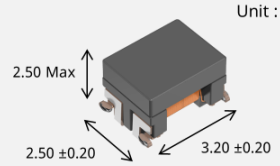
In Mass Production

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: -55 to +155°C (including self-temperature rise)
- Compliant with AEC-Q200

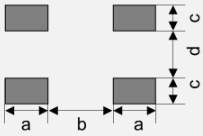
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



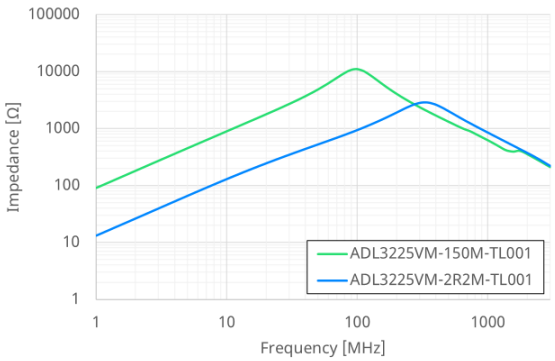
a	b	c	d
1.05	2.00	0.60	0.40

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.

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

Datasheet PDF

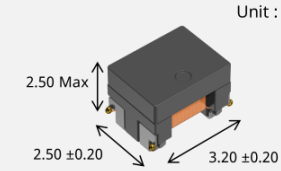
In Mass Production

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 +150°C (including self-temperature rise)
- Compliant with AEC-Q200

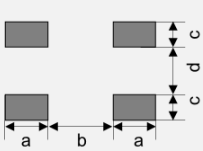
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



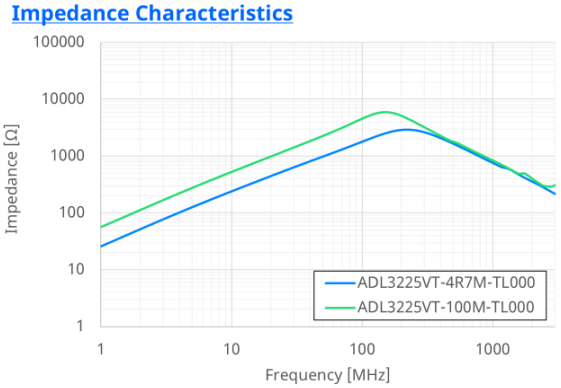
a	b	c	d
1.05	2.00	0.60	0.40

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.)

Impedance Characteristics



: The blue cells are listed and contain samples.

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

ADL Series

Datasheet PDF

ADL4532VK (for High Current) Wire Wound

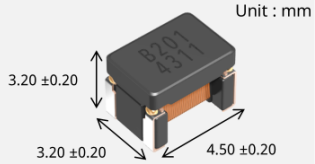
In Mass Production

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

Unit : mm



Recommended Land pattern

Unit : mm

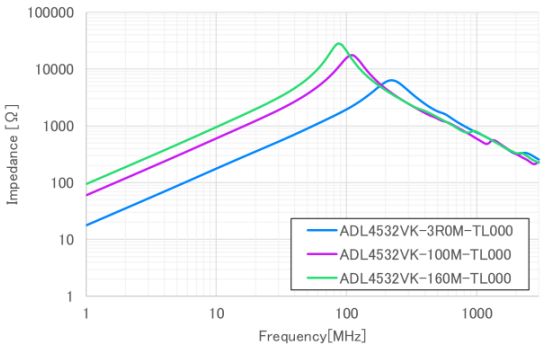
a	b	c	d
1.05	3.20	0.90	1.60

Electrical Characteristics

Part #	L at 100kHz [uH] ±20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]	
			Ambient temp. [deg.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℃: Current value at 50℃ self-heating when a product is mounted on the board for self-heating measurement.
Itemp. 125℃: Current value at 30℃ 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.

Datasheet PDF

ADL8030VA (1 Coil Solution) Wire Wound

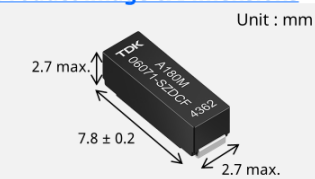
In Mass Production

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

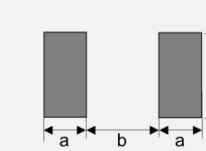
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



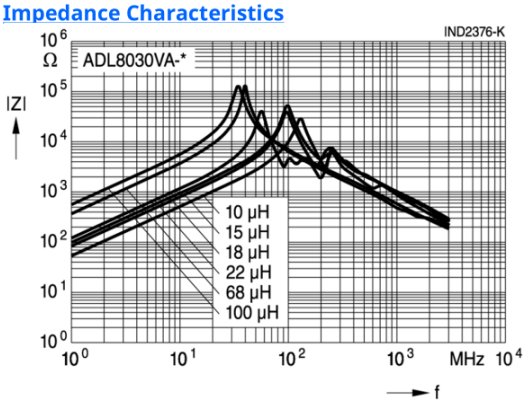
a	b	c
0.7	6.5	2.5

Electrical Characteristics

Part #	L at 100kHz [uH] +/- 20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]		
				Ambient temp. [deg.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 ΔL/L0 ≤ 30% at $T_{ambient}$
Itemp. : Maximum permissible DC with temperature increase of ≤ 40 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.

ADL/ADM Series

Datasheet PDF

ADM32FSC — Wire Wound

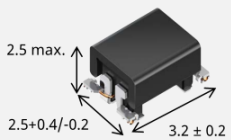
In Mass Production

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

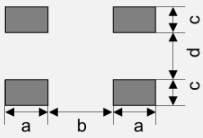
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



a	b	c	d
1.20	1.70	1.15	0.40

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

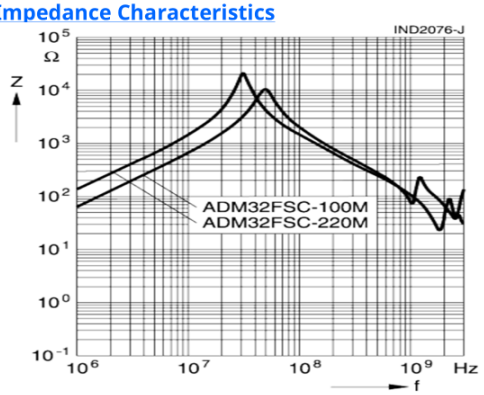
Isat. : Based on the inductance change rate (30% below the initial value)

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.

MLD Series

Datasheet

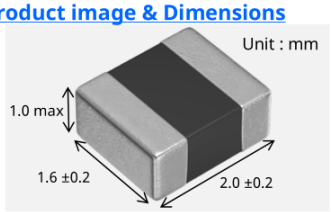
MLD2016 (High current) Multilayer

In Mass Production

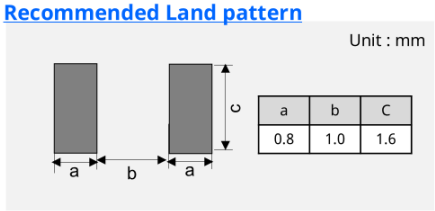
Features

•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



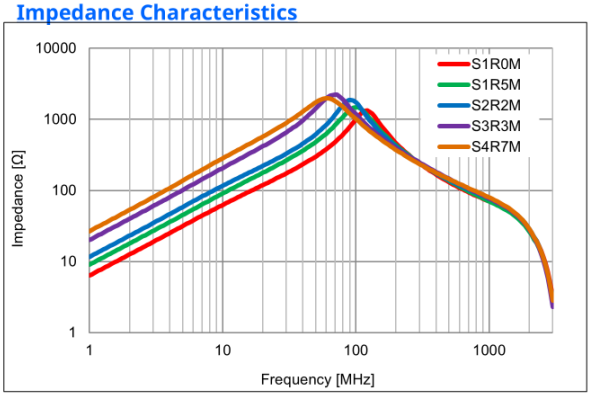
a	b	C
0.8	1.0	1.6

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

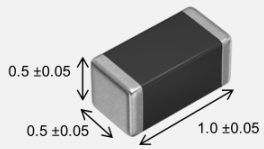
Datasheet PDF

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

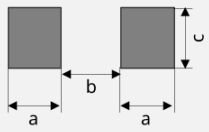
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



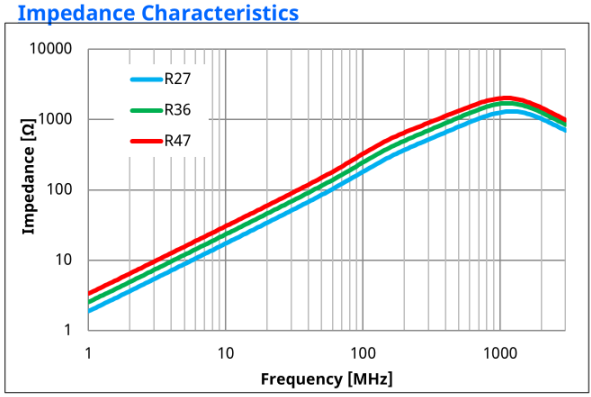
a	b	c
0.5	0.4	0.5

Electrical Characteristics

Part #	L at 25MHz [uH] +/- 25%	DCR [ohm] typ.	DCR [ohm] max.	Rated current max. [mA] Ambient temp. [deg.C] 105	Rated current max. [mA] Ambient temp. [deg.C] 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℃) : 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.

MLJ1608-G (Wide band) Multilayer

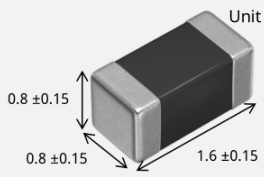
Datasheet PDF

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

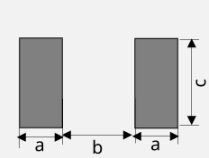
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



a	b	c
0.6	0.8	0.8

Electrical Characteristics

•*Tentative

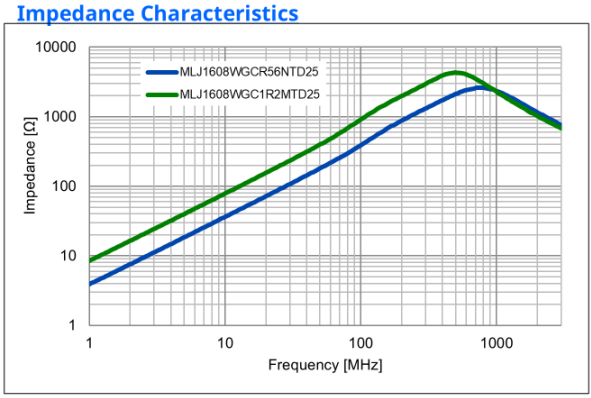
Part #	L at 25MHz	DCR [ohm] typ.	DCR [ohm] max.	Rated current max. [mA] Ambient temp. [deg.C] 105	Rated current max. [mA] Ambient temp. [deg.C] 125	Status
MLJ1608WGCR56NTD25	0.56uH +/-30%	0.45	0.70	500	400	M.P.
MLJ1608WGC1R2MTD25 *	1.25uH +/-20%	0.81	1.20	350	200	Under development

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

Rated current (125℃): 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

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

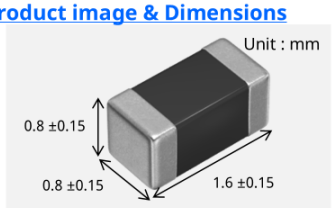
Datasheet PDF

In Mass Production

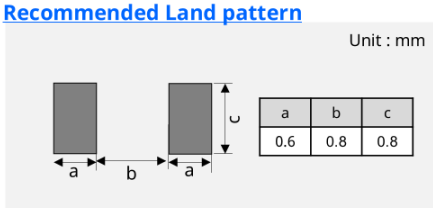
Features

- 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



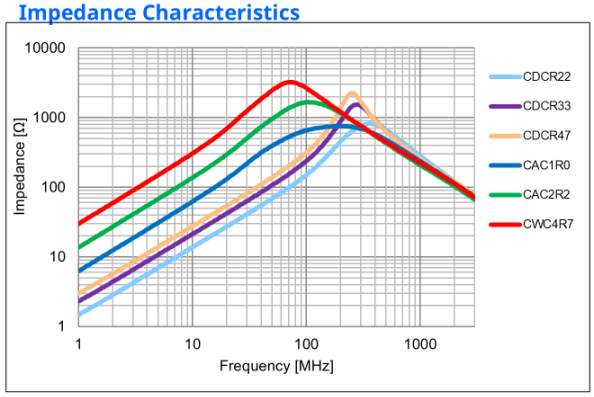
a	b	c
0.6	0.8	0.8

Electrical Characteristics

Part #	L measuring conditions Frequency [MHz]	L[uH] +/- 20%	DCR +/-30% [ohm]	Rated current max. [mA] Ambient temp. [deg.C] 105	125
MLZ1608CDCR22MTD25	25	0.22	0.27	600	500
MLZ1608CDCR33MTD25	25	0.33	0.31	560	460
MLZ1608CDCR47MTD25	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℃) : based on "the temperature increasing". (Temperature increase 40 deg.C by self heating.)
Rated current (125℃) : 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

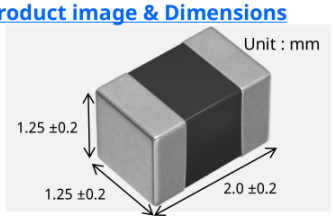
Datasheet PDF

In Mass Production

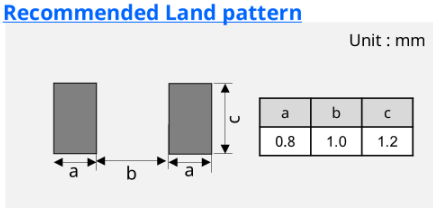
Features

- 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



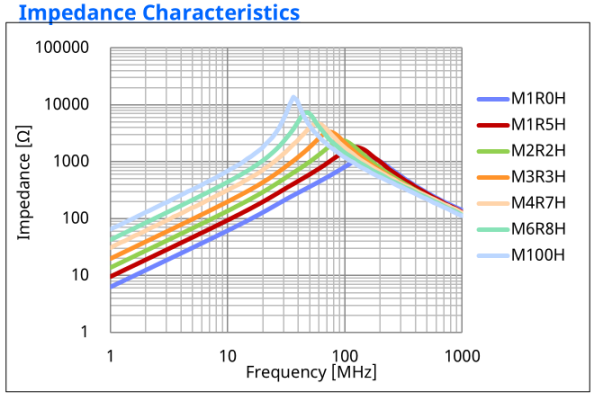
a	b	c
0.8	1.0	1.2

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

Datasheet PDF

In Mass Production

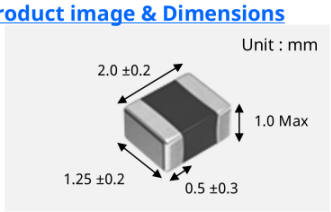
Features

•The thickness of this product is 1.0mm,and it is very thin compared with other same kind of products.

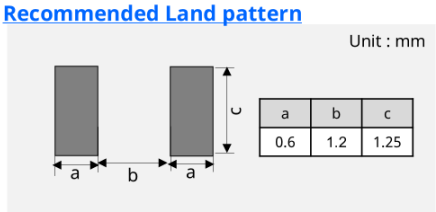
•This product consists of original fine copper pattern with micro-processing technology .

•This product corresponds to RoHS.

Product image & Dimensions



Recommended Land pattern



a	b	c
0.6	1.2	1.25

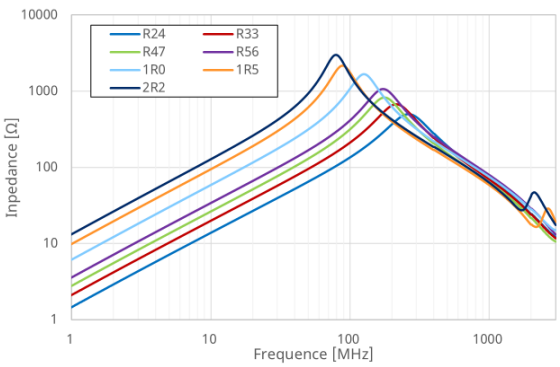
Electrical Characteristics

*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

Datasheet PDF

In Mass Production

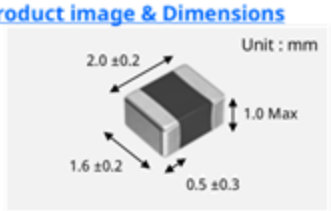
Features

•The thickness of this product is 1.0mm,and it is very thin compared with other same kind of products.

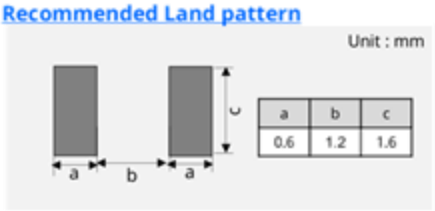
•This product consists of original fine copper pattern with micro-processing technology .

•This product corresponds to RoHS.

Product image & Dimensions



Recommended Land pattern



a	b	c
0.6	1.2	1.6

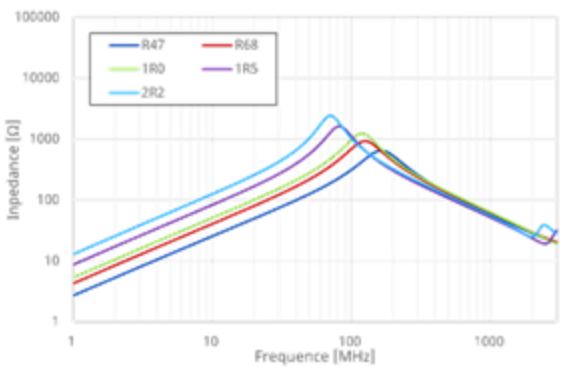
Electrical Characteristics

*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

Datasheet PDF

In Mass Production

Features

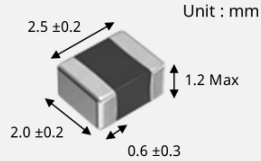
•The thickness of this product is 1.2mm,and it is very thin compared with other same kind of products.

•This product consists of original fine copper pattern with micro-processing technology .

•This product corresponds to RoHS.

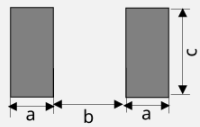
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



a	b	c
0.7	1.5	2.0

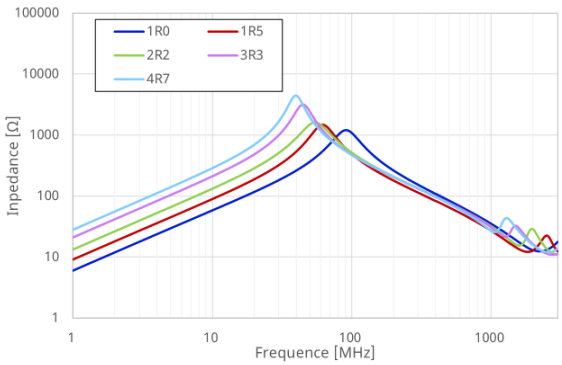
Electrical Characteristics

*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

Datasheet PDF

In Mass Production

Features

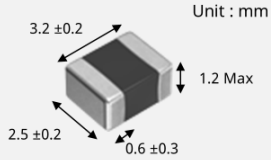
•The thickness of this product is 1.2mm,and it is very thin compared with other same kind of products.

•This product consists of original fine copper pattern with micro-processing technology .

•This product corresponds to RoHS.

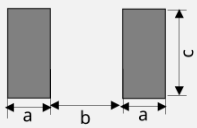
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



a	b	c
0.8	2.0	2.5

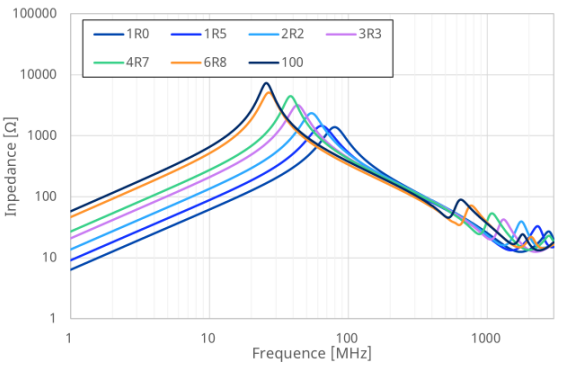
Electrical Characteristics

*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

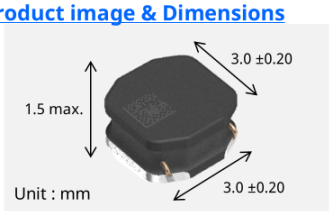
In Mass Production

Datasheet PDF

Features

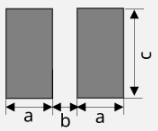
- Package size is 3.0mm (L) x 3.0mm(W) x 1.5mm(T)
- VLS3015CX-H series corresponds to RoHS
- Operating temperature range from -40deg.C to 125deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern

Unit : mm



a	b	c
1.6	0.8	3.0

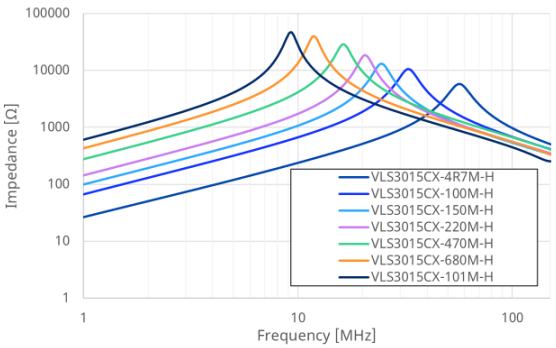
Electrical Characteristics

*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-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.)

Impedance Characteristics



: The blue cells are listed and contain samples.

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

VLS3015CZ-HE — Wire Wound

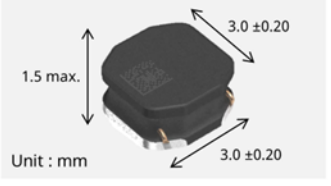
In Mass Production

Datasheet PDF

Features

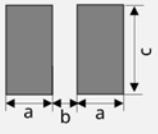
- Package size is 3.0mm (L) x 3.0mm(W) x 1.5mm(T)
- VLS3015CZ-HE series corresponds to RoHS
- Operating temperature range from -40deg.C to 135deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern

Unit : mm



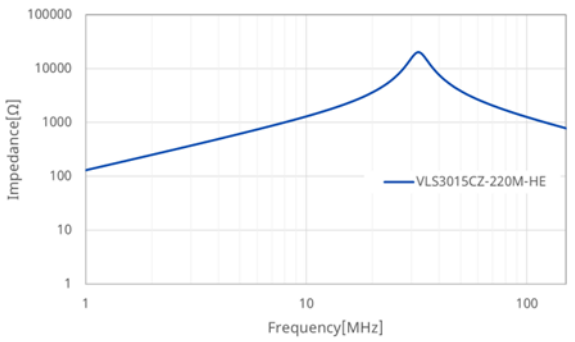
a	b	c
1.6	0.8	3.0

Electrical Characteristics

Part #	L at 1MHz [uH] +/- 20%	DCR max. [ohm]	Isat. typ. [mA]	Itemp. typ. [mA]		
				Ambient temp. [deg.C]		
				85	105	125
VLS3015CZ-220M-HE	22	0.776	635	765	675	420

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.

Impedance Characteristics



: The blue cells are listed and contain samples.

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

VLS Series

VLS4015CX-H — Wire Wound

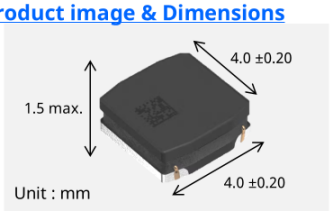
In Mass Production

Datasheet PDF

Features

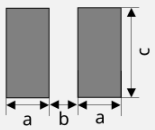
- Package size is 4.0mm (L) x 4.0mm(W) x 1.5mm(T)
- VLS4015CX-H series corresponds to RoHS
- Operating temperature range from -40deg.C to 125deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern

Unit : mm



a	b	c
1.9	1.2	4.0

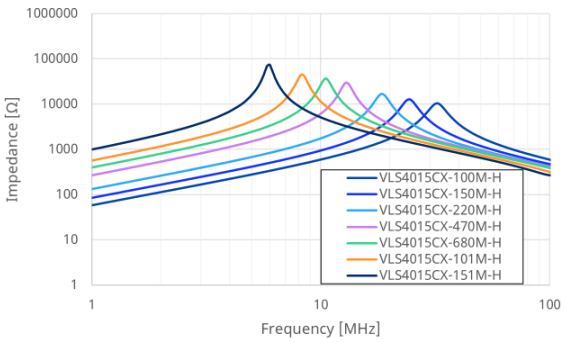
Electrical Characteristics

*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

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.

VLS4020CX-H — Wire Wound

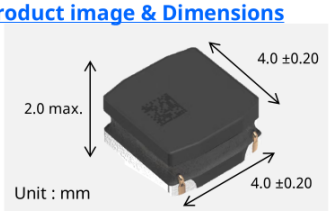
In Mass Production

Datasheet PDF

Features

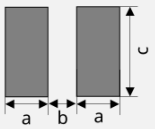
- Package size is 4.0mm (L) x 4.0mm(W) x 2.0mm(T)
- VLS4020CX-H series corresponds to RoHS
- Operating temperature range from -40deg.C to 125deg.C (Self-rise temperature included)

Product image & Dimensions



Recommended Land pattern

Unit : mm



a	b	c
1.9	1.2	4.0

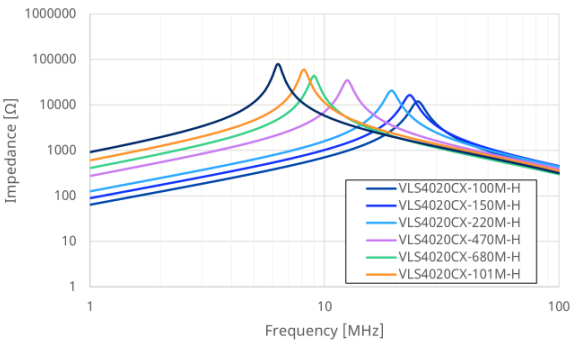
Electrical Characteristics

*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-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

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

VLS5030EX-D — Wire Wound

In Mass Production

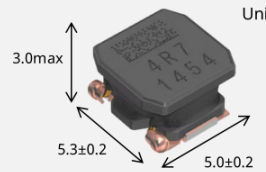
Datasheet PDF

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

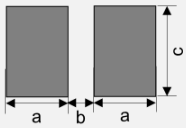
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



a	b	c
2.6	1.2	4.0

Electrical Characteristics

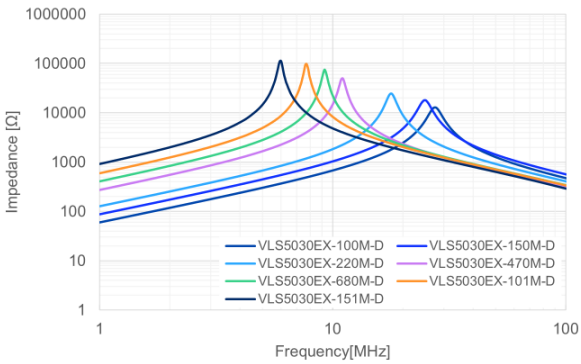
*Listed items are part of the full lineup.

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-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

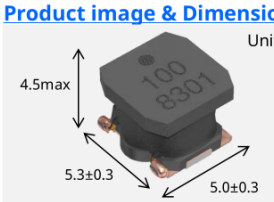
Datasheet PDF

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

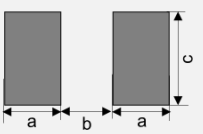
Product image & Dimensions

Unit : mm



Recommended Land pattern

Unit : mm



a	b	c
2.0	2.1	4.0

Electrical Characteristics

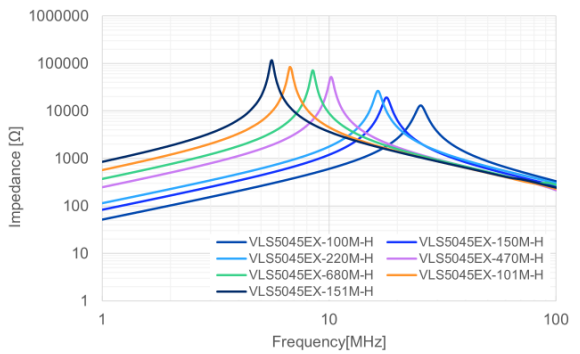
*Listed items are part of the full lineup.

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

Datasheet PDF

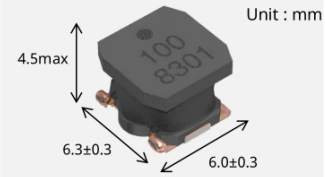
VLS6045EX-H — Wire Wound

In Mass Production

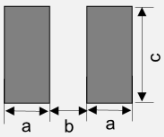
Features

- 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



a	b	c
2.4	2.3	5.1

Electrical Characteristics

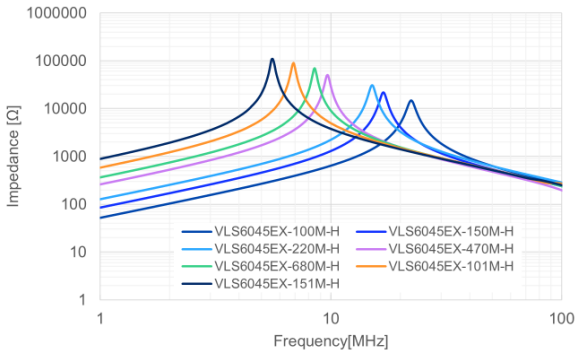
*Listed items are part of the full lineup.

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.)
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.

CLF Series

CLF5030NI-D type — Wire Wound

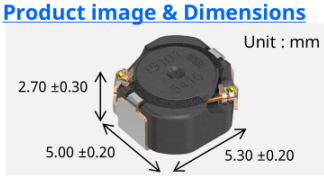
In Mass Production

Datasheet PDF

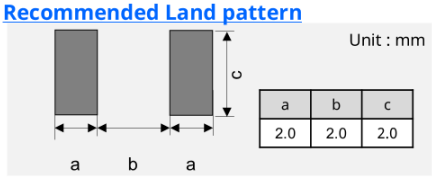
Features

- Magnetic shield type wound inductor for power circuits.
- It can be used at a wide temperature range.
  -55 to +150°C (including self-temperature rise)
- 1 to 470µH, wide E-6 series lineup allows for various usages.
- Operating temperature range:
  -55 to +150°C(including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern



a	b	c
2.0	2.0	2.0

Electrical Characteristics

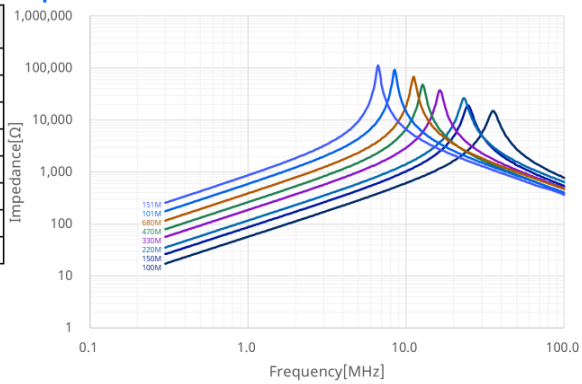
Part #	L at 100kHz [uH]	Tolerance	DCR [ohm]	Tolerance	Isat. typ. [A]	Itemp. typ. [A]
CLF5030NIT-100M-D	10	±20%	0.095	±20%	2.15	1.70
CLF5030NIT-150M-D	15		0.140		1.75	1.40
CLF5030NIT-220M-D	22		0.200		1.42	1.20
CLF5030NIT-330M-D	33		0.310		1.20	0.88
CLF5030NIT-470M-D	47		0.435		1.00	0.68
CLF5030NIT-680M-D	68		0.530		0.86	0.59
CLF5030NIT-101M-D	100		0.880		0.68	0.40
CLF5030NIT-151M-D	150		1.290		0.57	0.32

* Rated current: smaller value of either Isat or Itemp.

Isat: When based on the inductance change rate (30% below the nominal value)

Itemp: When based on the temperature increase (temperature increase of 40℃ 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.

CLF6045NI-D type — Wire Wound

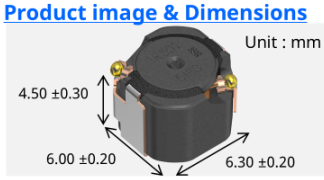
In Mass Production

Datasheet PDF

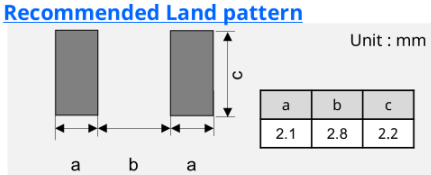
Features

- Magnetic shield type wound inductor for power circuits.
- It can be used at a wide temperature range.
  -55 to +150°C (including self-temperature rise)
- 1 to 470µH, wide E-6 series lineup allows for various usages.
- Operating temperature range:
  -55 to +150°C(including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern



a	b	c
2.1	2.8	2.2

Electrical Characteristics

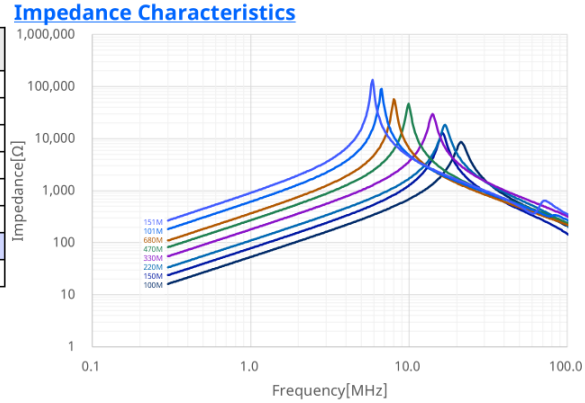
Part #	L at 100kHz [uH]	Tolerance	DCR [ohm]	Tolerance	Isat. typ. [A]	Itemp. typ. [A]
CLF6045NIT-100M-D	10	±20%	0.035	±20%	2.60	2.60
CLF6045NIT-150M-D	15		0.060		2.20	2.00
CLF6045NIT-220M-D	22		0.075		1.80	1.80
CLF6045NIT-330M-D	33		0.100		1.50	1.60
CLF6045NIT-470M-D	47		0.130		1.20	1.40
CLF6045NIT-680M-D	68		0.200		1.10	1.10
CLF6045NIT-101M-D	100		0.320		0.85	0.86
CLF6045NIT-151M-D	150		0.480		0.70	0.72

* Rated current: smaller value of either Isat or Itemp.

Isat: When based on the inductance change rate (30% below the nominal value)

Itemp: When based on the temperature increase (temperature increase of 40℃ 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.

CLF/FLP Series

CLF7045NI-D type — Wire Wound

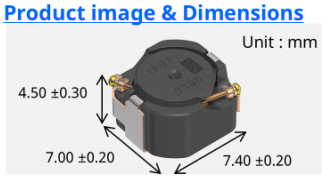
In Mass Production

Datasheet PDF

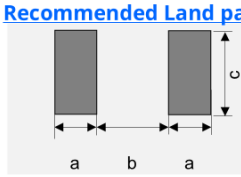
Features

- Magnetic shield type wound inductor for power circuits.
- It can be used at a wide temperature range.
  -55 to +150°C (including self-temperature rise)
- 1 to 470μH, wide E-6 series lineup allows for various usages.
- Operating temperature range:
  -55 to +150°C(including self-temperature rise)
- Compliant with AEC-Q200

Product image & Dimensions



Recommended Land pattern



a	b	c
2.4	3.3	2.2

Electrical Characteristics

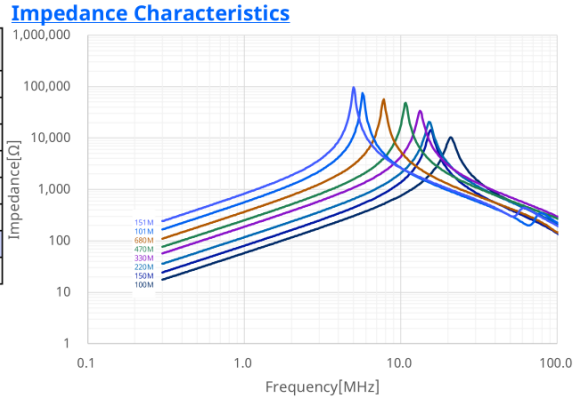
Part #	L at 100kHz [uH]	Tolerance	DCR [ohm]	Tolerance	Isat. typ. [A]	Itemp. typ. [A]
CLF7045NIT-100M-D	10	±20%	0.033	±20%	3.40	3.10
CLF7045NIT-150M-D	15		0.055		2.80	2.60
CLF7045NIT-220M-D	22		0.069		2.40	2.20
CLF7045NIT-330M-D	33		0.097		1.90	1.80
CLF7045NIT-470M-D	47		0.130		1.60	1.70
CLF7045NIT-680M-D	68		0.170		1.30	1.50
CLF7045NIT-101M-D	100		0.260		1.10	1.05
CLF7045NIT-151M-D	150		0.430		0.89	0.95

* Rated current: smaller value of either Isat or Itemp.

Isat: When based on the inductance change rate (30% below the nominal value)

Itemp: When based on the temperature increase (temperature increase of 40℃ 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.

FLP5535 — Wire Wound

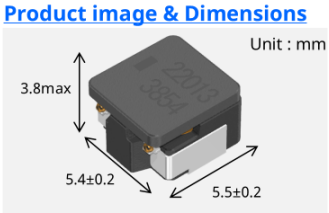
Under Development

Datasheet PDF

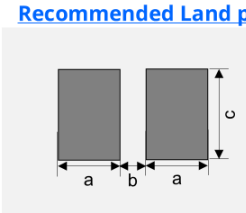
Features

- Package size is 5.7mm max.(L) X 5.6mm max.(W)
- FLP5535 is available for High current
- FLP5535 series corresponds to RoHS.
- Operating temperature range from -55deg.C to 150deg.C
- (Self-rise temperature included)
- Compliant with AEC-Q200 Rev.E

Product image & Dimensions



Recommended Land pattern



a	b	c
2.5	1.4	2.4

Electrical Characteristics

*Listed items are part of the full lineup.

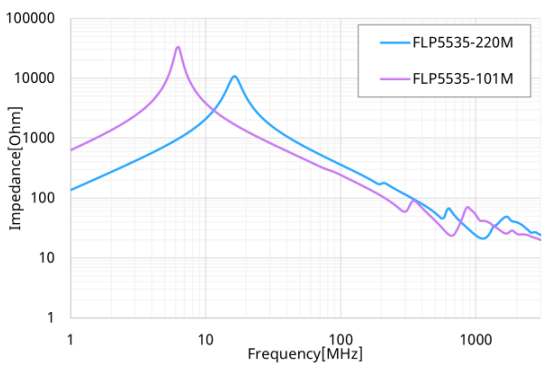
Part #	L[uH] at 100KHz	DCR [Ω] Max.	Isat [mA] typ.	Itemp typ. [mA]	
			Ambient temp. [℃]	Ambient temp. [℃]	
			25	105	125
FLP5535-220M	22±20%	0.210	2200	1550	1200
FLP5535-101M	100±20%	1.02	950	700	550

Isat : based on "the inductance change rate". (30% below the nominal inductance value.)
Itemp (105℃) : based on "the temperature increasing". (Temperature increase 40℃ by self heating.)
Itemp (125℃) : based on "the temperature increasing". (Temperature increase 25℃ by self heating.)

*Itemp. are reference values evaluated under consideration of PCB 100x40x1.6mm with 70um Cu thickness on both side.
Temperature rise is highly dependent on many factors so it should be verified for application conditions.

	Evaluation Sample	Approval Sample (PPAP Timing)	M.P.
FLP5535	Available	Oct.-2026	Dec.-2026

Impedance Characteristics



: The blue cells are listed and contain samples.

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