For Reference

TEST DATA OF MUS1R52415

Regulated DC Power Supply
February 4, 2025

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COSEL CO.,LTD.

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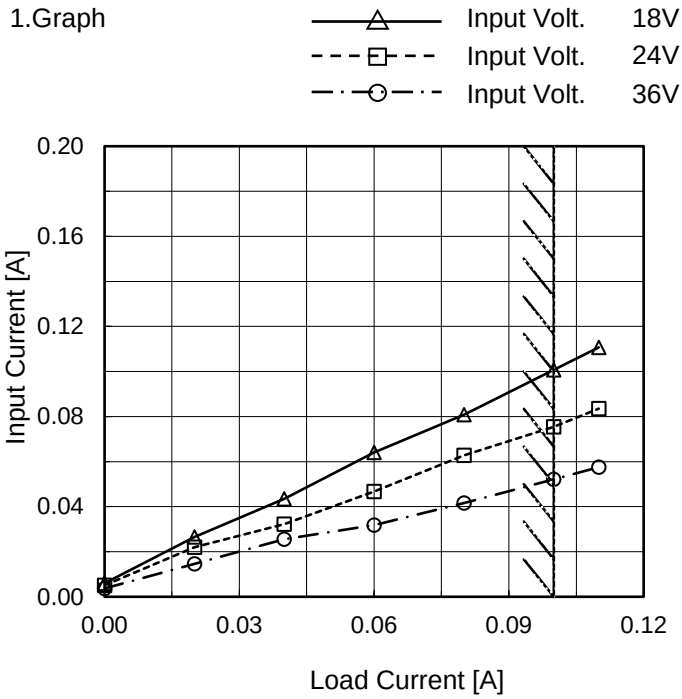
Model	MUS1R52415
Item	Input Current (by Load Current)
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



Note: Slanted line shows the range of the rated load current.

2.Values

Load Current [A]	Input Current [A]		
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]
0.00	0.006	0.005	0.004
0.02	0.027	0.022	0.015
0.04	0.043	0.032	0.026
0.06	0.064	0.047	0.032
0.08	0.081	0.063	0.042
0.10	0.101	0.076	0.052
0.11	0.111	0.084	0.058
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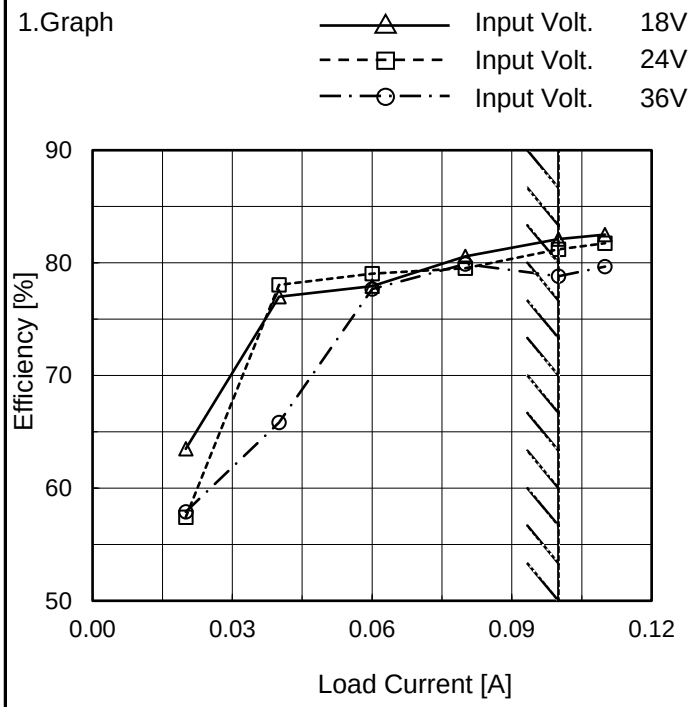
Model	MUS1R52415
Item	Efficiency (by Load Current)
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



Note: Slanted line shows the range of the rated load current.

2.Values

Load Current [A]	Efficiency [%] Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]
0.00	-	-	-
0.02	63.5	57.4	57.9
0.04	77.0	78.0	65.8
0.06	77.9	79.0	77.7
0.08	80.6	79.5	79.9
0.10	82.1	81.2	78.8
0.11	82.5	81.7	79.7
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--	-	-	-
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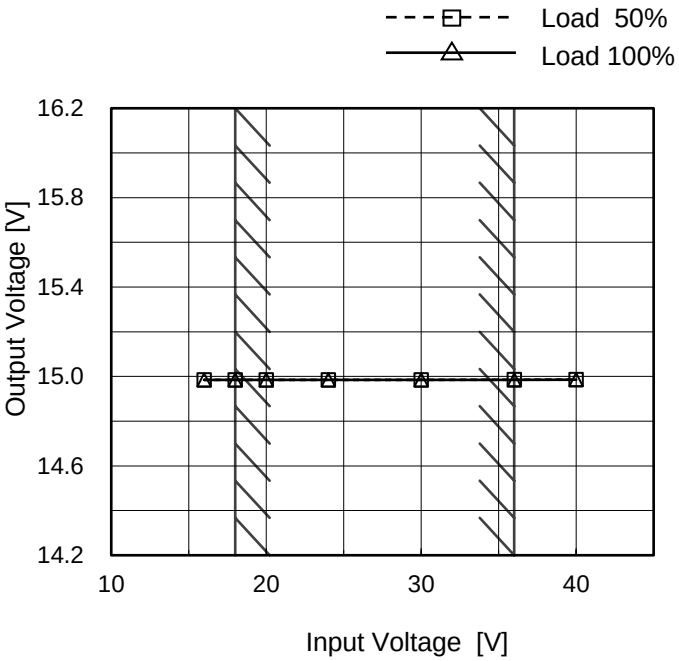
Model	MUS1R52415
Item	Line Regulation
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



Note: Slanted line shows the range of the rated input voltage.

2.Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
16	14.985	14.985
18	14.985	14.985
20	14.985	14.985
24	14.985	14.985
30	14.985	14.985
36	14.986	14.985
40	14.986	14.986
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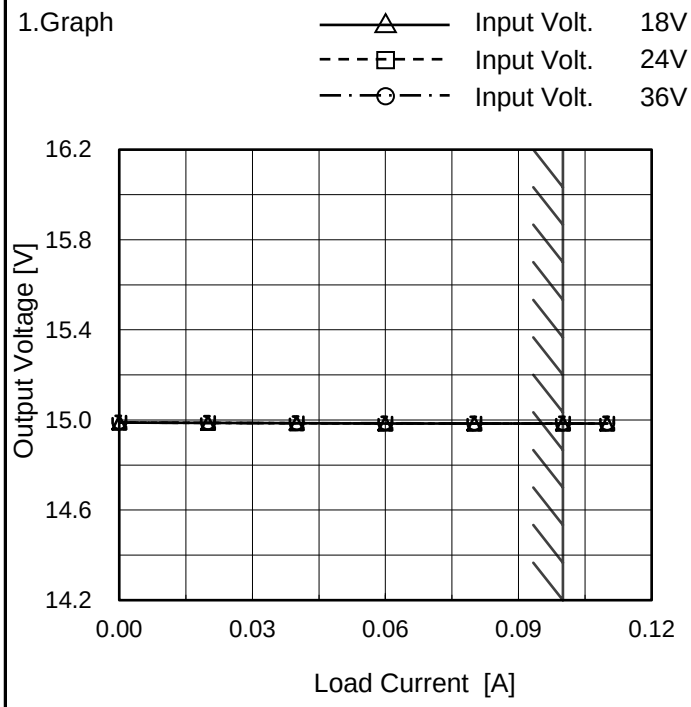
COSEL

Model	MUS1R52415
Item	Load Regulation
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



Note: Slanted line shows the range of the rated load current.

2.Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]
0.00	14.988	14.989	14.988
0.02	14.987	14.986	14.987
0.04	14.986	14.986	14.986
0.06	14.985	14.985	14.985
0.08	14.984	14.984	14.985
0.10	14.984	14.984	14.985
0.11	14.984	14.984	14.985
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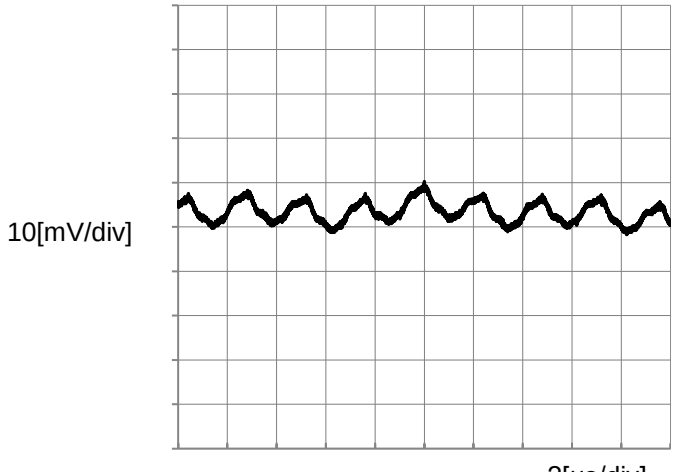
Item	Ripple-Noise
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 24V
Load 100%



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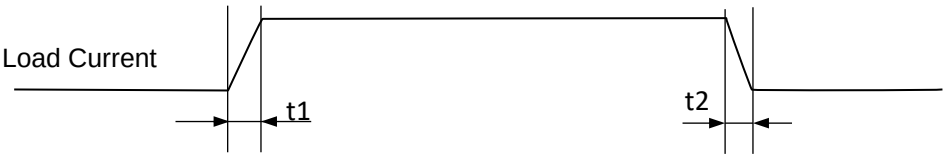
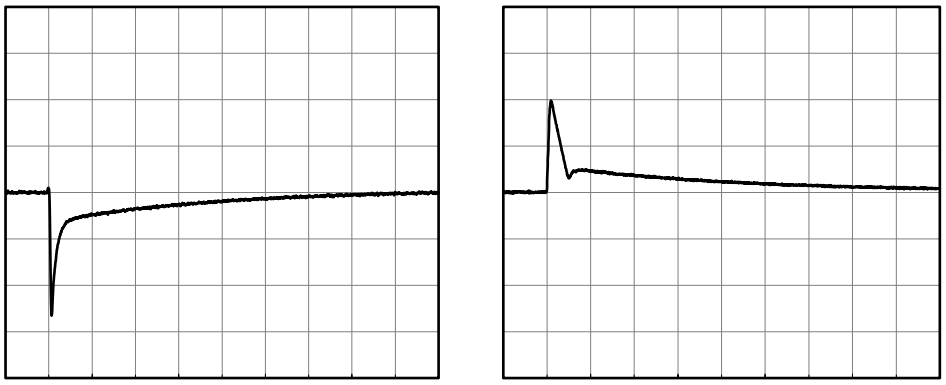
Model	MUS1R52415	
Item	Dynamic Load Response	Temperature 25°C Testing Circuitry Figure A
Object	+15V0.1A	

Input Volt. 24 V
Cycle 1000 ms

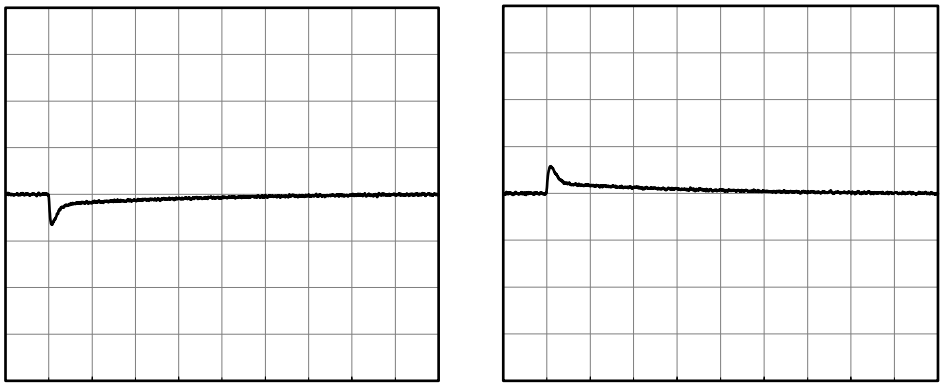
Response. t1=t2=50µs. Typ



Load 0%(0A) ←→
Load 100%(0.1A)



Load 50%(0.05A) ←→
Load 100%(0.1A)



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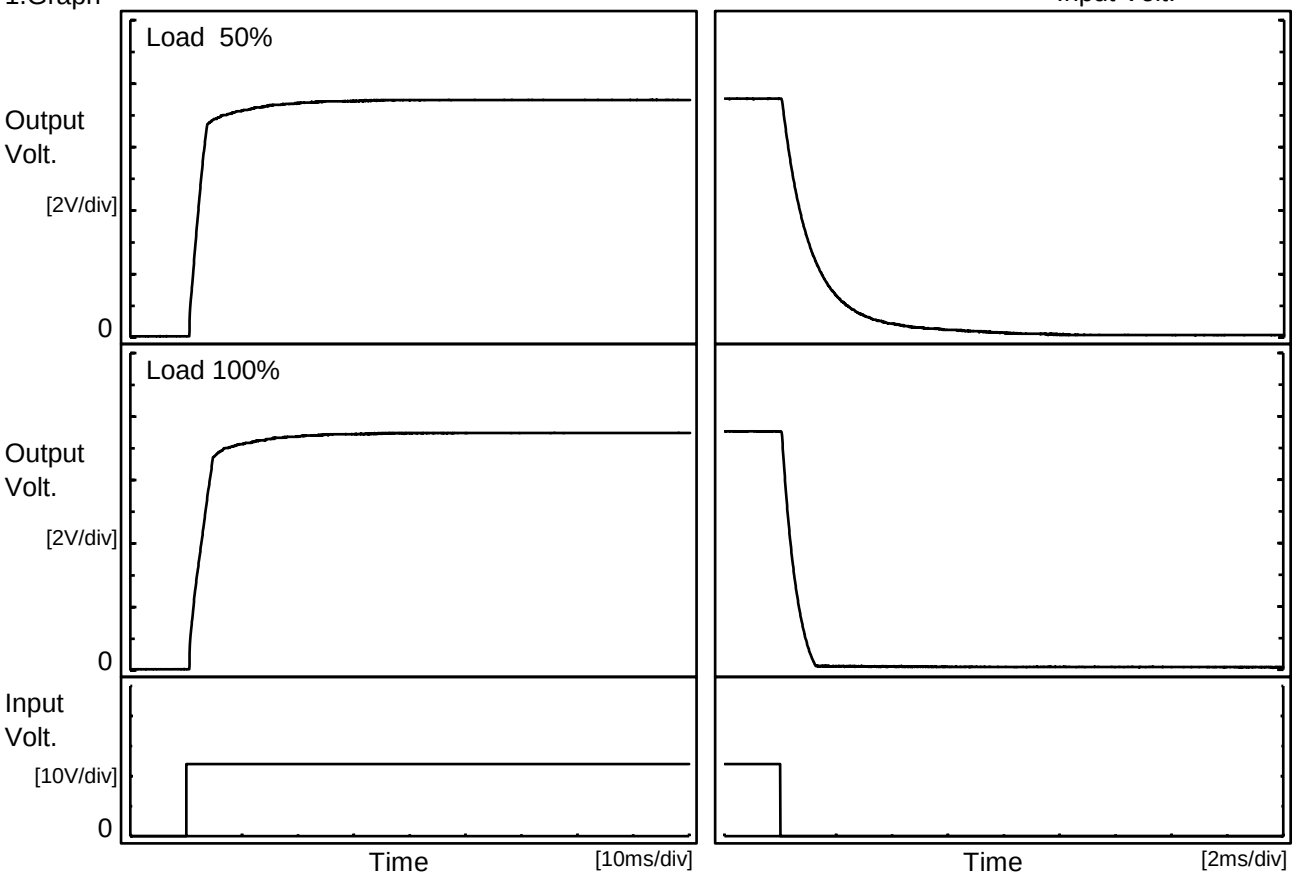
Model	MUS1R52415
Item	Rise and Fall Time
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure A

1.Graph

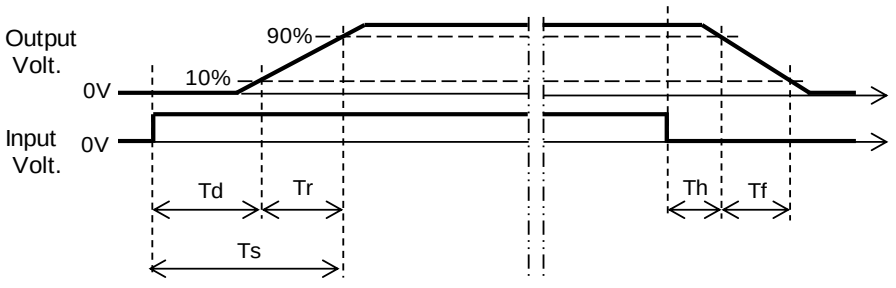
Input Volt. 24 V



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	0.7	3.7	4.4	0.2	2.6
100 %	0.7	4.7	5.4	0.1	0.9



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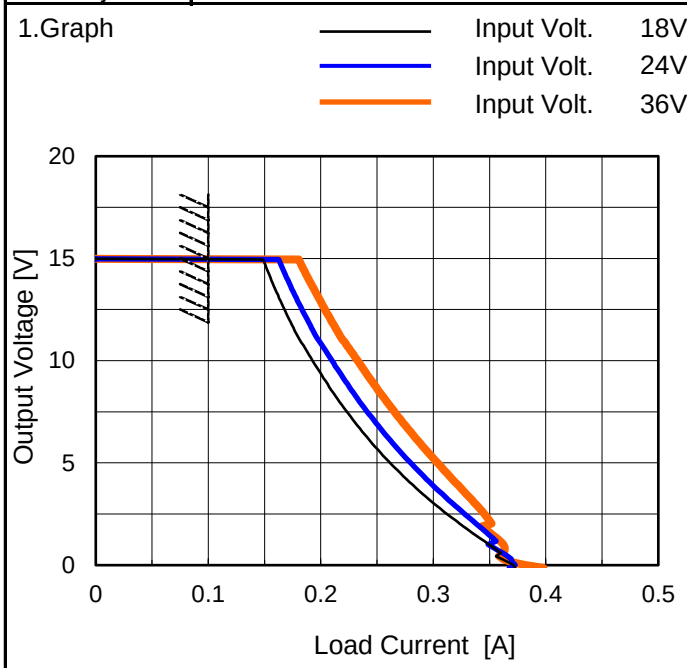
Model	MUS1R52415
Item	Overcurrent Protection
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



Note: Slanted line shows the range of the rated load current.

2.Values

Output Voltage [V]	Load Current [A]		
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]
14.25	0.15	0.17	0.19
13.50	0.16	0.17	0.19
12.00	0.17	0.19	0.21
10.50	0.19	0.20	0.23
9.00	0.20	0.22	0.25
7.50	0.22	0.24	0.26
6.00	0.24	0.26	0.29
4.50	0.27	0.29	0.31
3.00	0.30	0.32	0.34
1.50	0.33	0.35	0.35
0.00	0.37	0.37	0.40
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Model	MUS1R52415	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+15V0.1A	

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V
-40	14.881	14.882	14.883
25	14.984	14.984	14.985
85	15.020	15.020	15.021

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+15V0.1A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-40	14.0	14.0
25	14.1	14.1
85	14.0	14.0

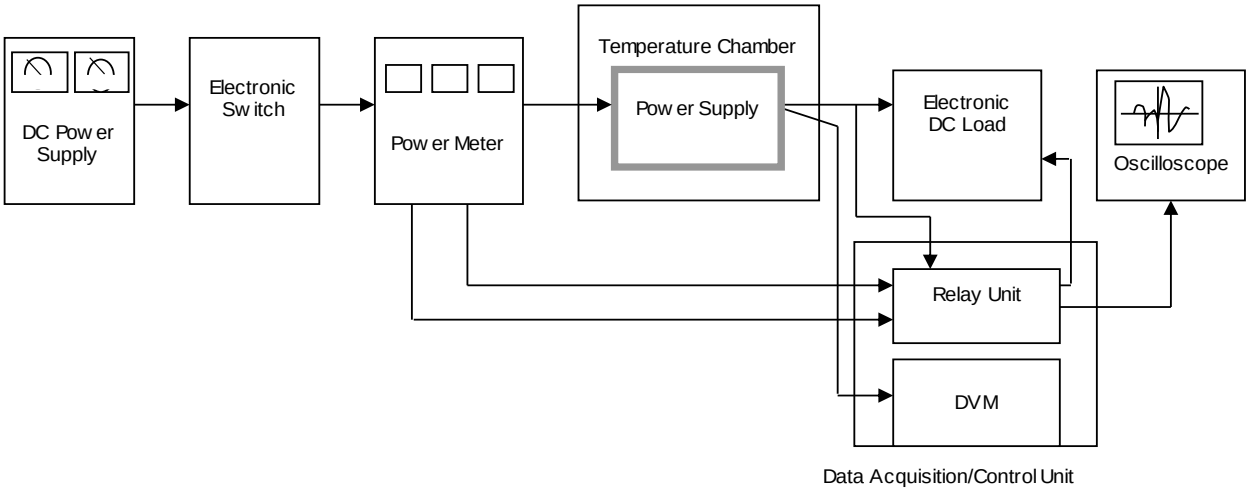

Figure A

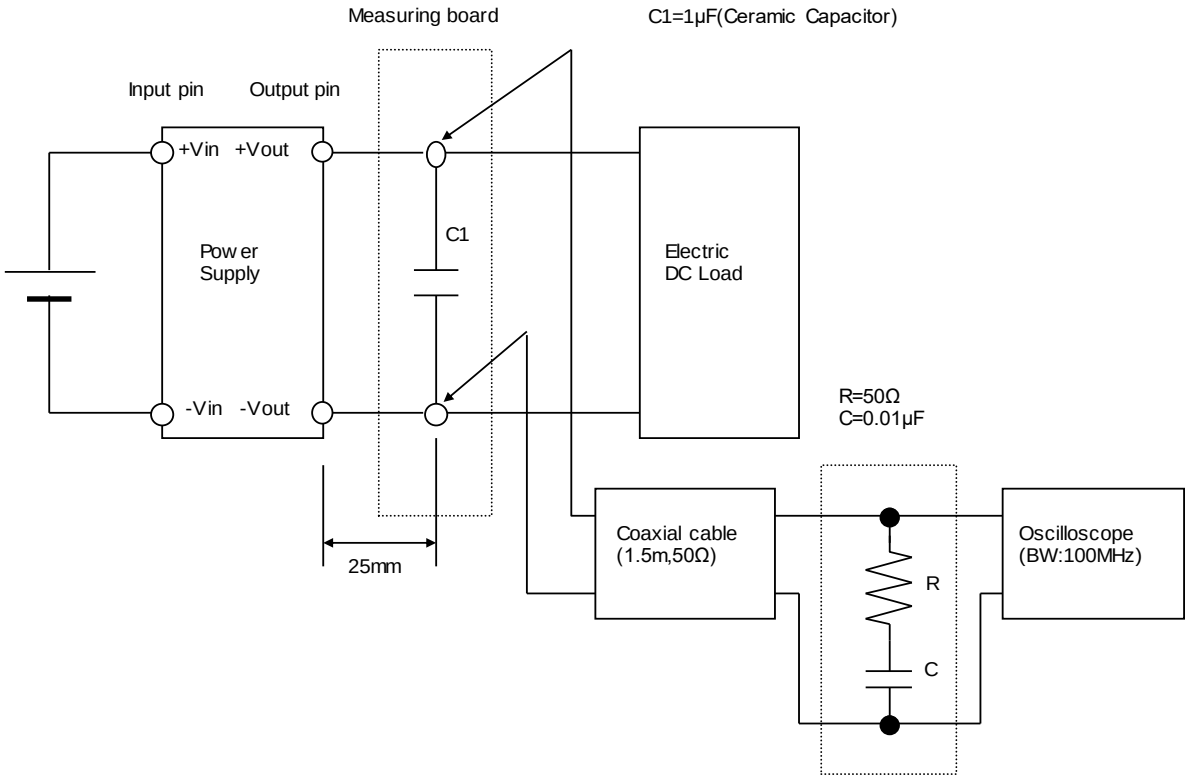

Figure B