For Reference

TEST DATA OF MUS1R54815

Regulated DC Power Supply
February 4, 2025

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COSEL CO.,LTD.

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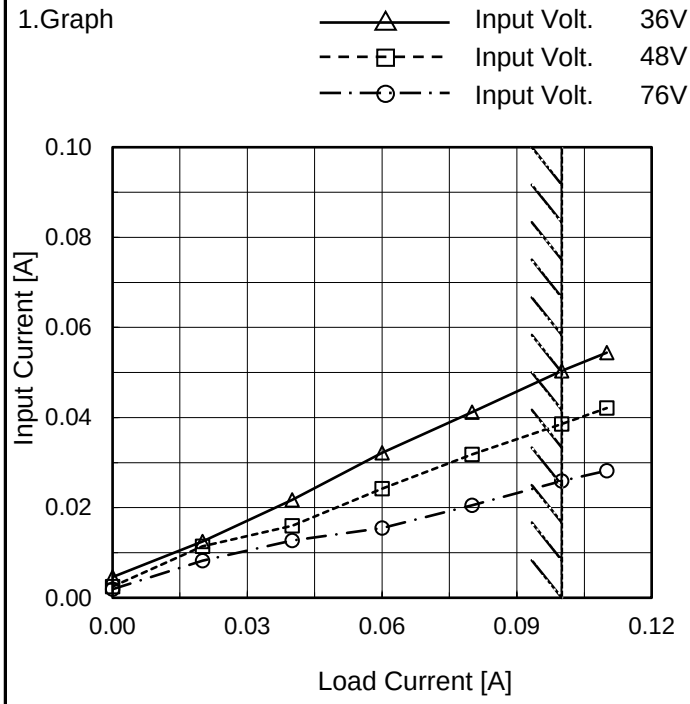
Model	MUS1R54815
Item	Input Current (by Load Current)
Object	———————

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. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	0.005	0.003	0.002
0.02	0.013	0.011	0.008
0.04	0.022	0.016	0.013
0.06	0.032	0.024	0.016
0.08	0.041	0.032	0.021
0.10	0.050	0.039	0.026
0.11	0.054	0.042	0.028
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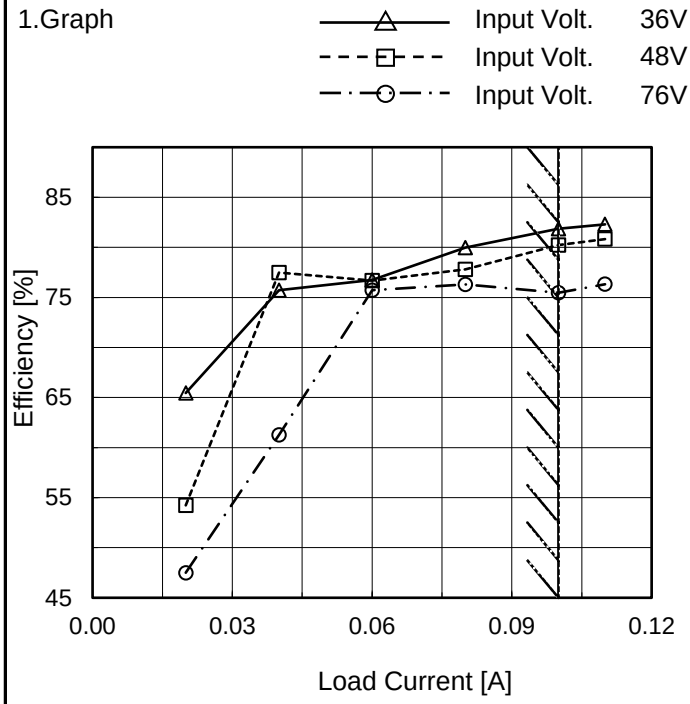
BC-12048

COSEL

Model	MUS1R54815
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. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	-	-	-
0.02	65.5	54.2	47.5
0.04	75.7	77.5	61.3
0.06	76.7	76.7	75.7
0.08	80.0	77.8	76.3
0.10	81.9	80.2	75.5
0.11	82.3	80.8	76.3
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--	-	-	-
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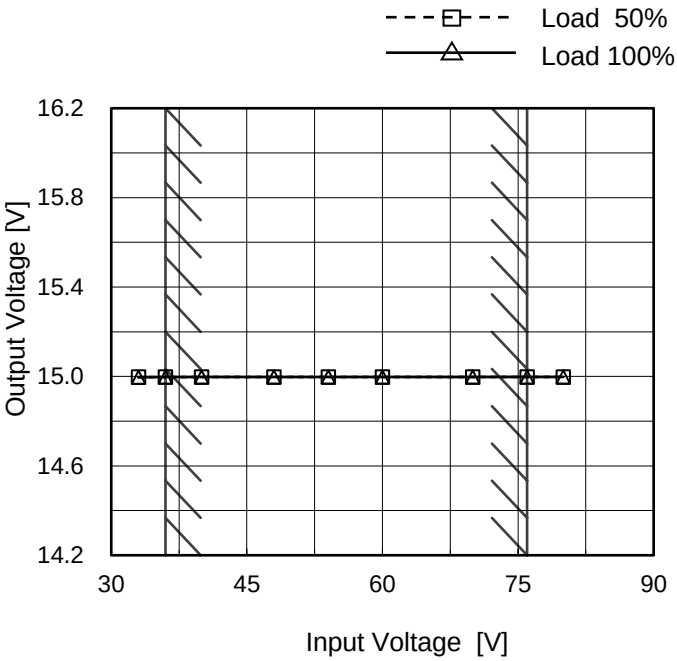
Model	MUS1R54815
Item	Line Regulation
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

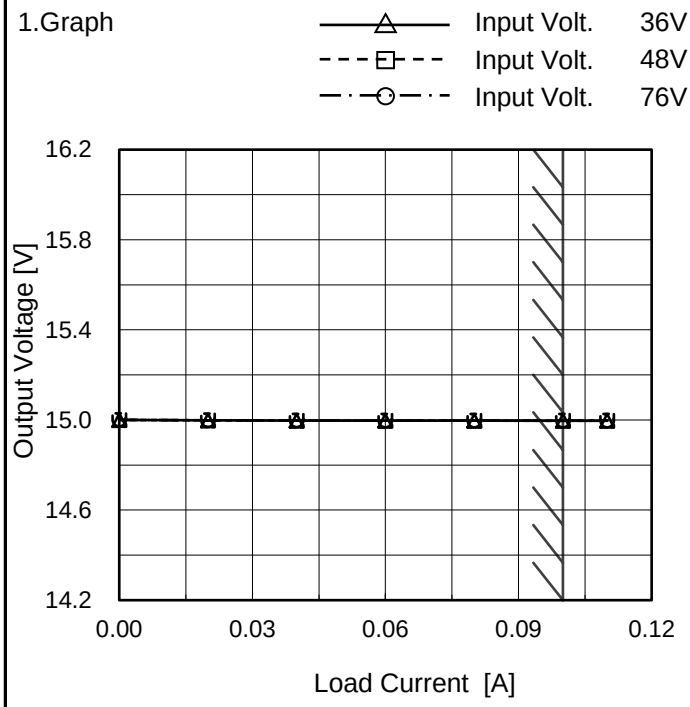
Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
33	14.997	14.997
36	14.997	14.997
40	14.997	14.997
48	14.997	14.997
54	14.997	14.997
60	14.997	14.997
70	14.997	14.997
76	14.998	14.998
80	14.998	14.998

COSEL

Model	MUS1R54815
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. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	15.000	15.000	15.001
0.02	14.999	14.998	14.998
0.04	14.998	14.998	14.998
0.06	14.997	14.997	14.998
0.08	14.997	14.997	14.998
0.10	14.996	14.996	14.997
0.11	14.996	14.997	14.997
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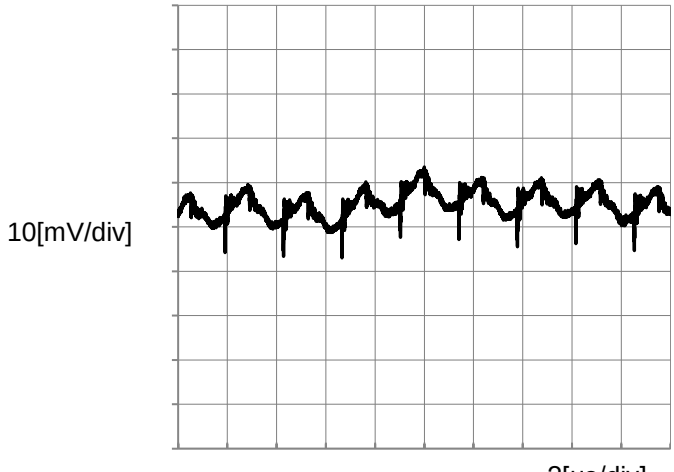
Item	Ripple-Noise
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 48V
Load 100%



BC-12048

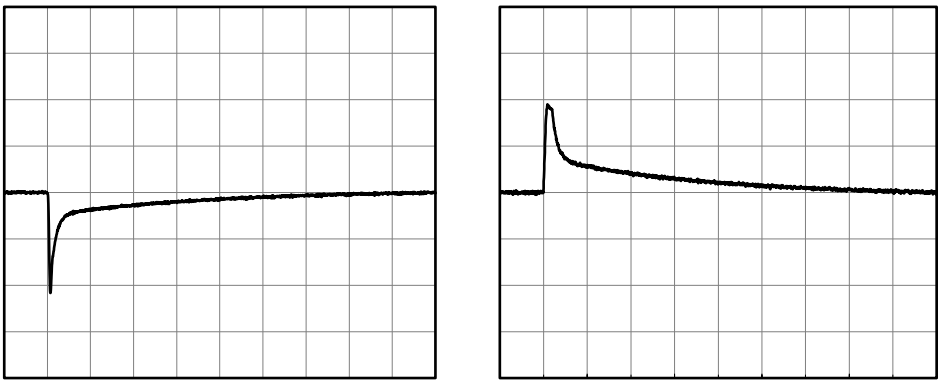
Model	MUS1R54815	
Item	Dynamic Load Response	Temperature 25°C Testing Circuitry Figure A
Object	+15V0.1A	

Input Volt. 48 V

Cycle 1000 ms

Response. t1=t2=50µs. Typ

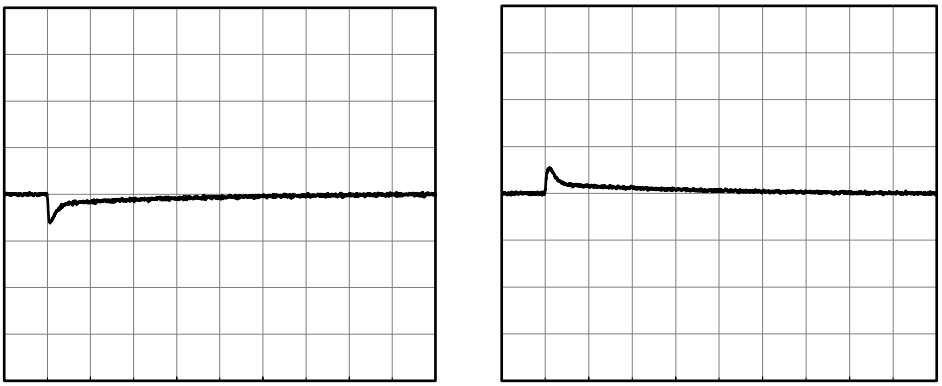
Load 0%(0A) ←→
Load 100%(0.1A)



200[mV/div]

1[ms/div] 1[ms/div]

Load 50%(0.05A) ←→
Load 100%(0.1A)



200[mV/div]

1[ms/div] 1[ms/div]

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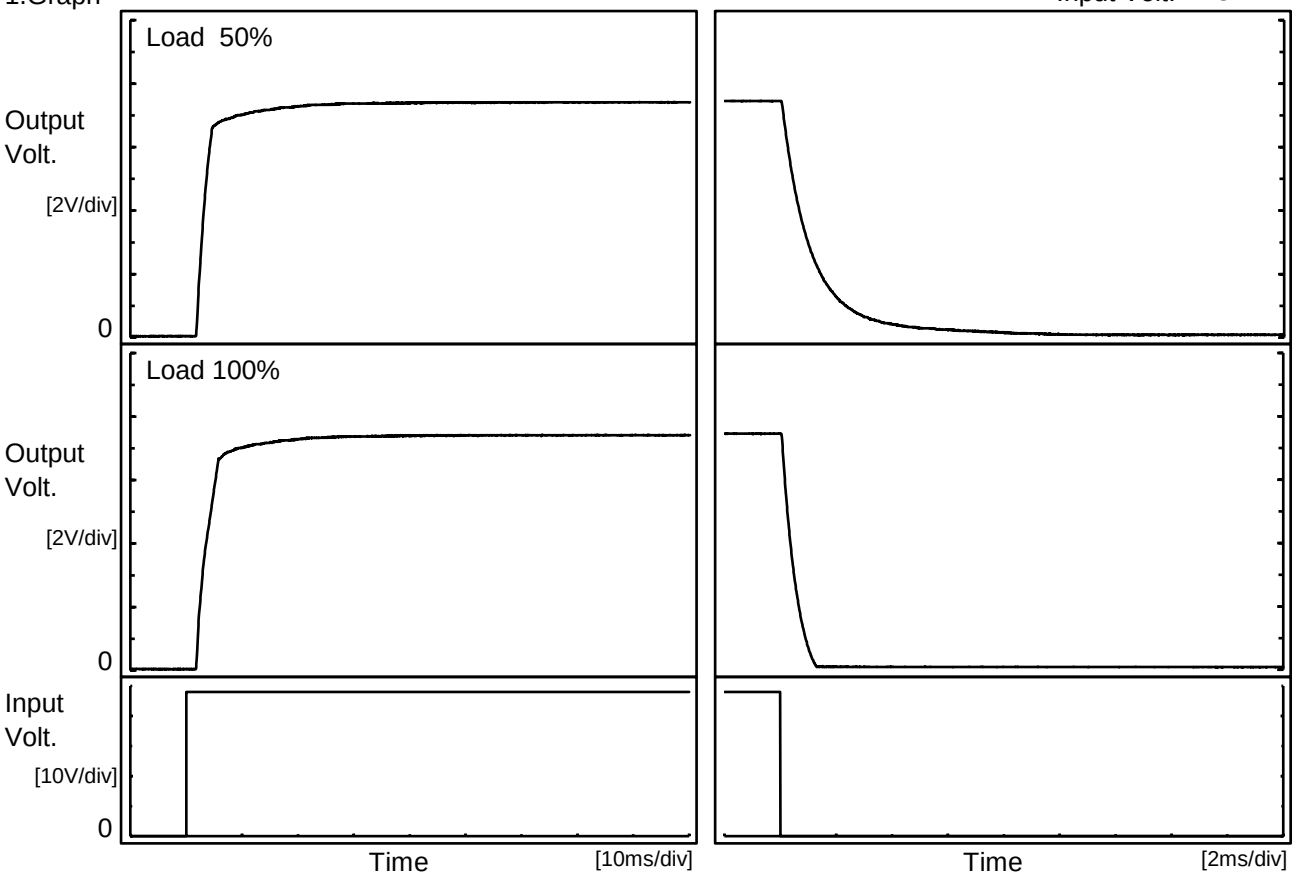
Model	MUS1R54815
Item	Rise and Fall Time
Object	+15V0.1A

Temperature 25°C
Testing Circuitry Figure A

1.Graph

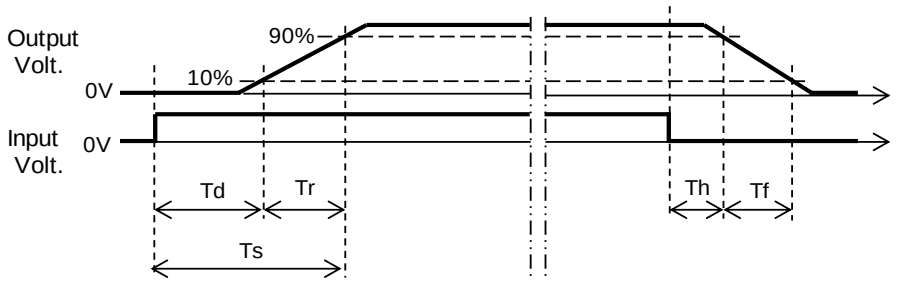
Input Volt. 48 V



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	2.0	3.9	5.9	0.1	2.6
100 %	2.0	4.7	6.7	0.1	0.9



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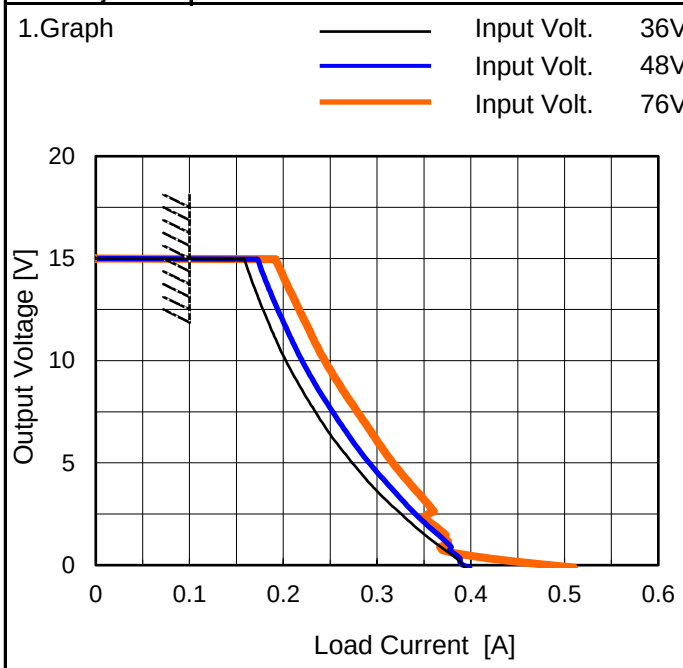
Model	MUS1R54815
Item	Overcurrent Protection
Object	+15V0.1A

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. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
14.25	0.16	0.18	0.20
13.50	0.17	0.18	0.21
12.00	0.18	0.20	0.22
10.50	0.20	0.21	0.24
9.00	0.21	0.23	0.26
7.50	0.23	0.25	0.28
6.00	0.25	0.27	0.30
4.50	0.28	0.30	0.33
3.00	0.31	0.33	0.35
1.50	0.35	0.36	0.37
0.00	0.39	0.40	0.51
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Model	MUS1R54815	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+15V0.1A	

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 36V	Input Volt. 48V	Input Volt. 76V
-40	14.894	14.896	14.897
25	14.996	14.997	14.998
85	15.026	15.027	15.027

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	28.6	28.5
25	28.6	28.7
85	28.7	28.7

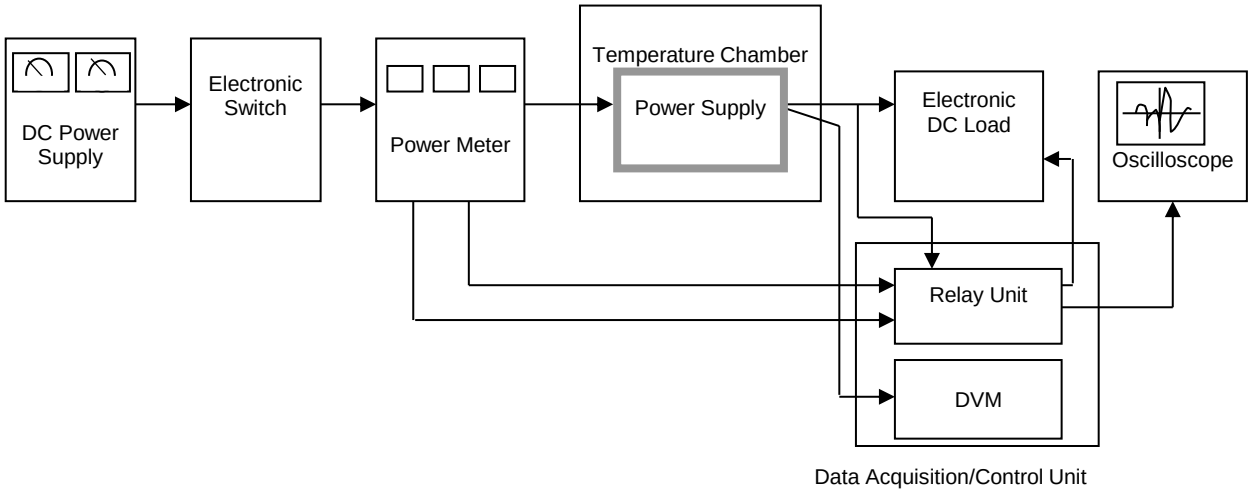

Figure A

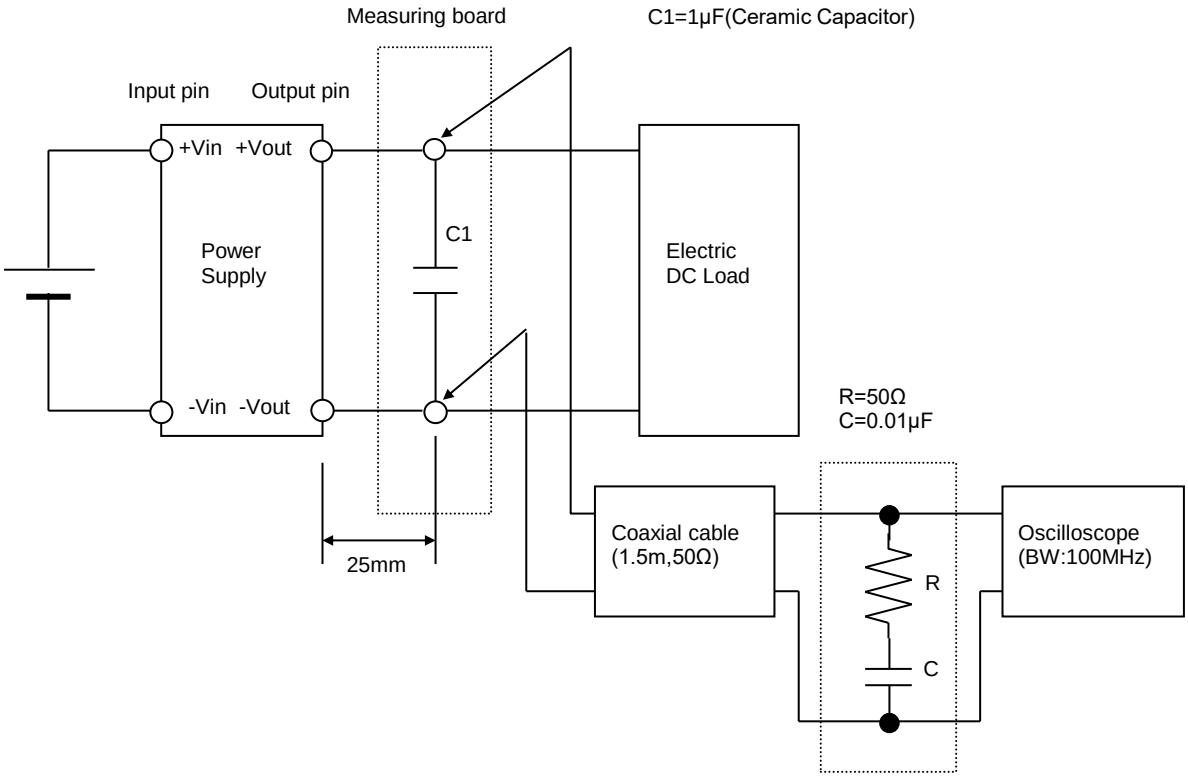

Figure B