For Reference

TEST DATA OF MUS1R51205

Regulated DC Power Supply
February 4, 2025

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COSEL CO.,LTD.

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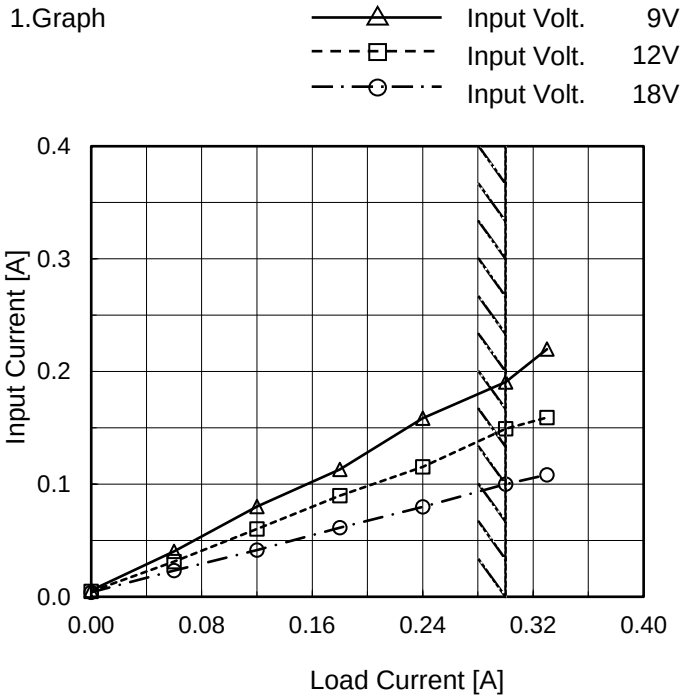
Model	MUS1R51205
Item	Input Current (by Load Current)
Object	———————

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. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
0.00	0.006	0.005	0.004
0.06	0.040	0.031	0.023
0.12	0.080	0.060	0.041
0.18	0.113	0.090	0.061
0.24	0.159	0.115	0.080
0.30	0.191	0.149	0.100
0.33	0.220	0.159	0.108
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--	-	-	-
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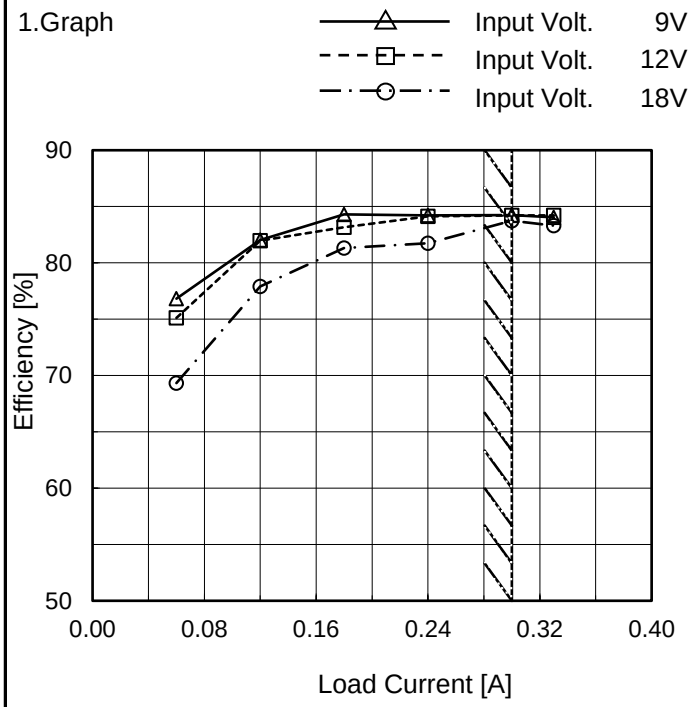
Model	MUS1R51205
Item	Efficiency (by Load Current)
Object	————————

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. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
0.00	-	-	-
0.06	76.8	75.1	69.3
0.12	82.0	82.0	77.9
0.18	84.3	83.2	81.3
0.24	84.2	84.1	81.7
0.30	84.2	84.2	83.7
0.33	84.1	84.2	83.3
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-

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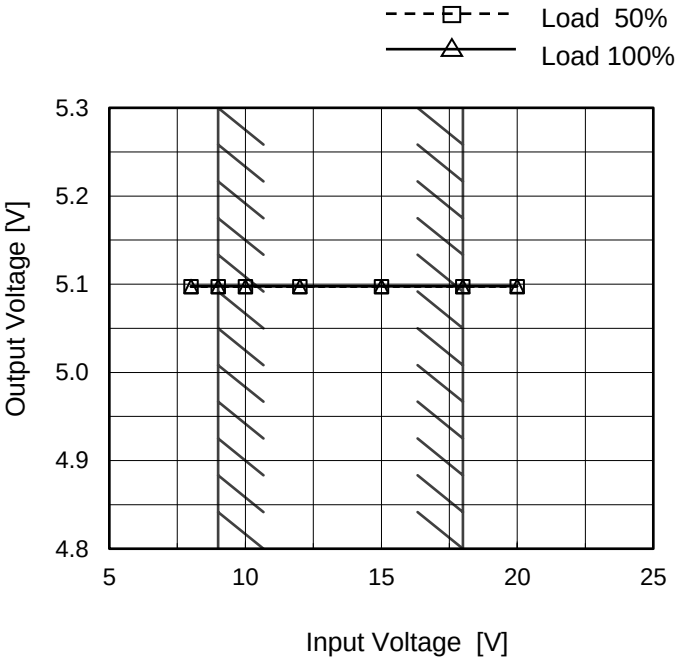
Model	MUS1R51205
Item	Line Regulation
Object	+5V0.3A

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%
8	5.097	5.098
9	5.097	5.098
10	5.097	5.098
12	5.097	5.098
15	5.097	5.098
18	5.097	5.098
20	5.097	5.098
--	-	-
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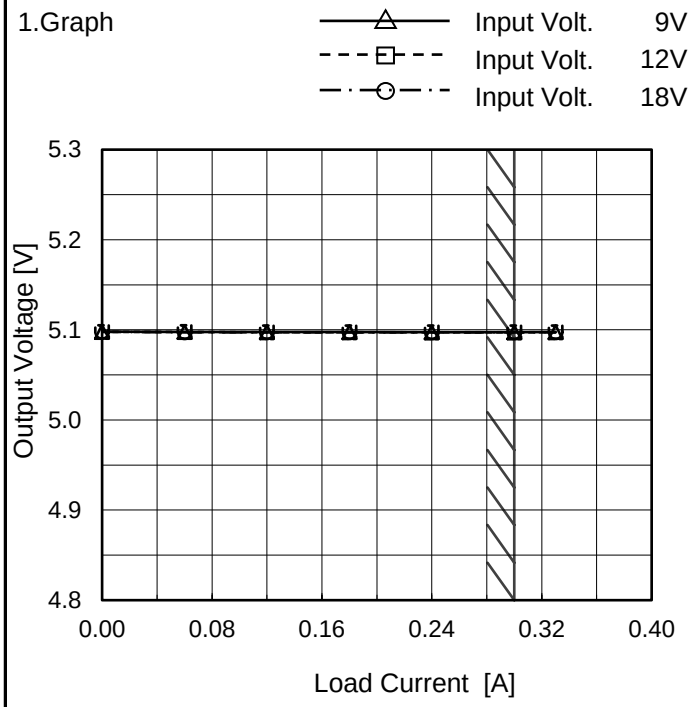
COSEL

Model	MUS1R51205
Item	Load Regulation
Object	+5V0.3A

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. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
0.00	5.098	5.098	5.098
0.06	5.098	5.098	5.097
0.12	5.098	5.097	5.097
0.18	5.098	5.097	5.097
0.24	5.097	5.097	5.097
0.30	5.097	5.097	5.097
0.33	5.098	5.097	5.097
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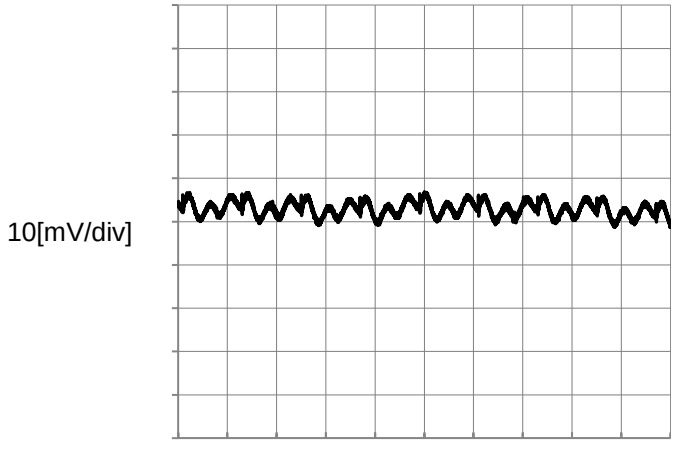
Item	Ripple-Noise
Object	+5V0.3A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 12V
Load 100%



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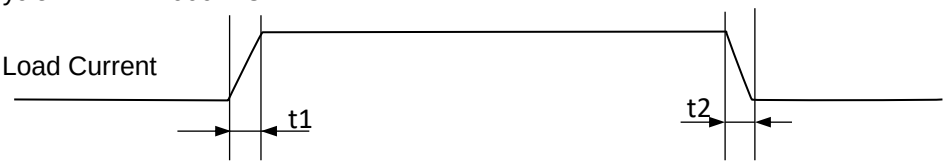
Model	MUS1R51205
Item	Dynamic Load Response
Object	+5V0.3A

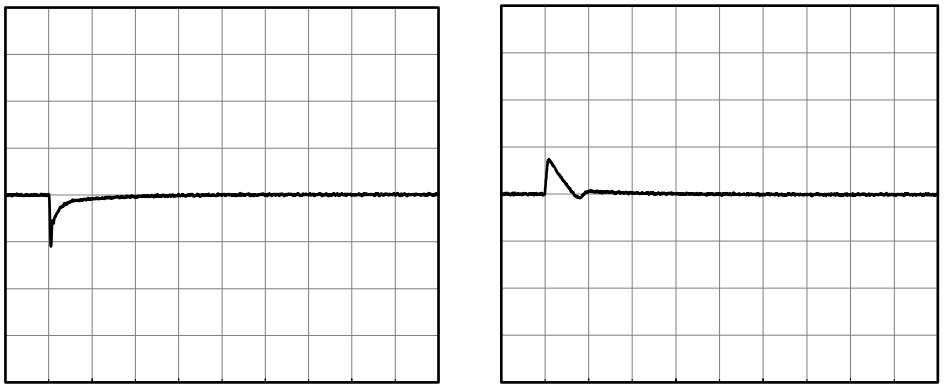
Temperature 25°C
Testing Circuitry Figure A

Input Volt. 12 V
Cycle 1000 ms

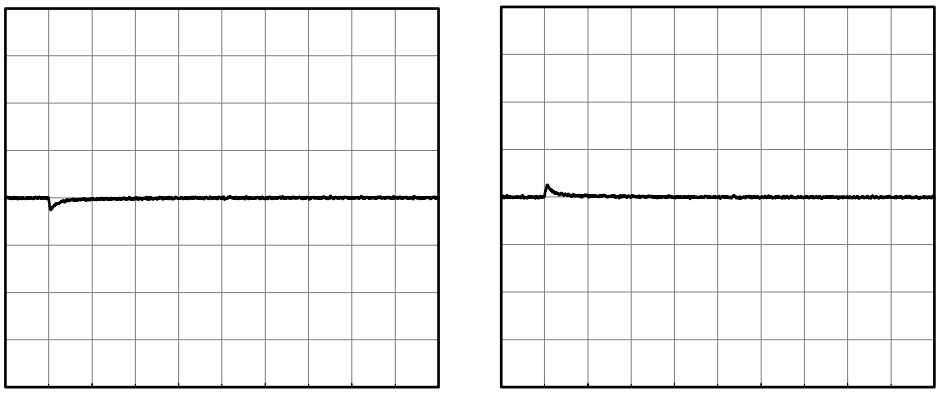
Response. t1=t2=50µs. Typ



Load 0%(0A) ←→
Load 100%(0.3A)



Load 50%(0.15A) ←→
Load 100%(0.3A)



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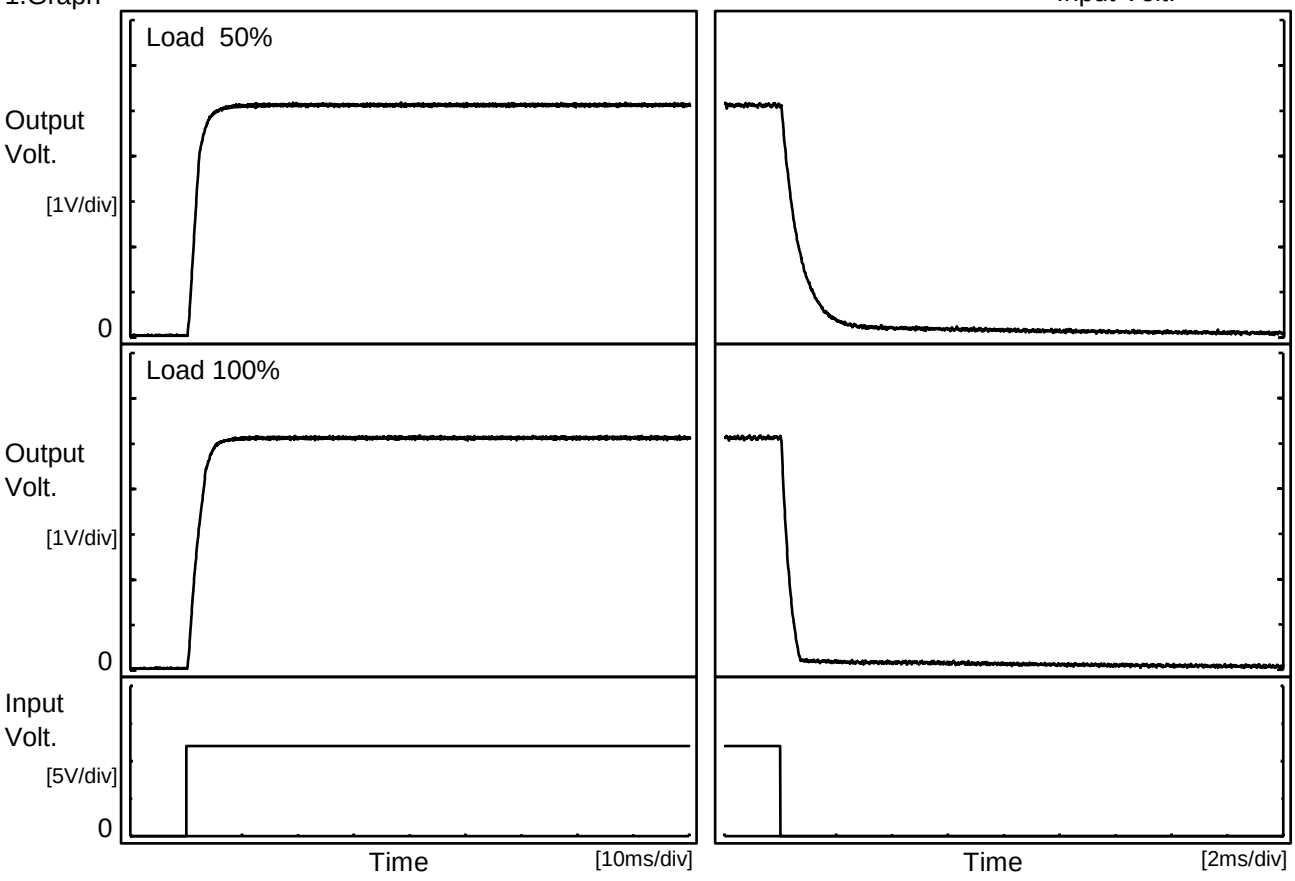
Model	MUS1R51205
Item	Rise and Fall Time
Object	+5V0.3A

Temperature 25°C
Testing Circuitry Figure A

1.Graph

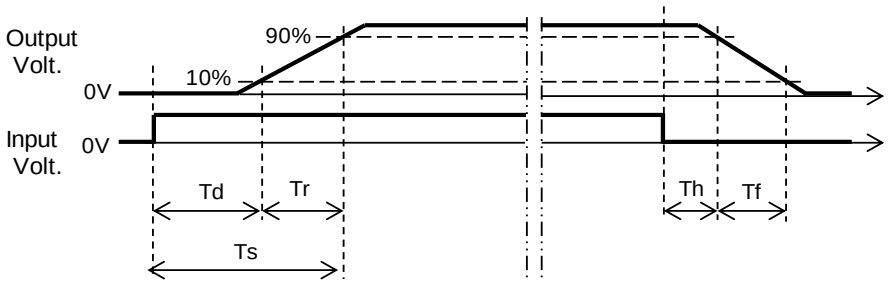
Input Volt. 12 V



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	0.6	2.7	3.3	0.1	1.6
100 %	0.6	3.2	3.8	0.1	0.5



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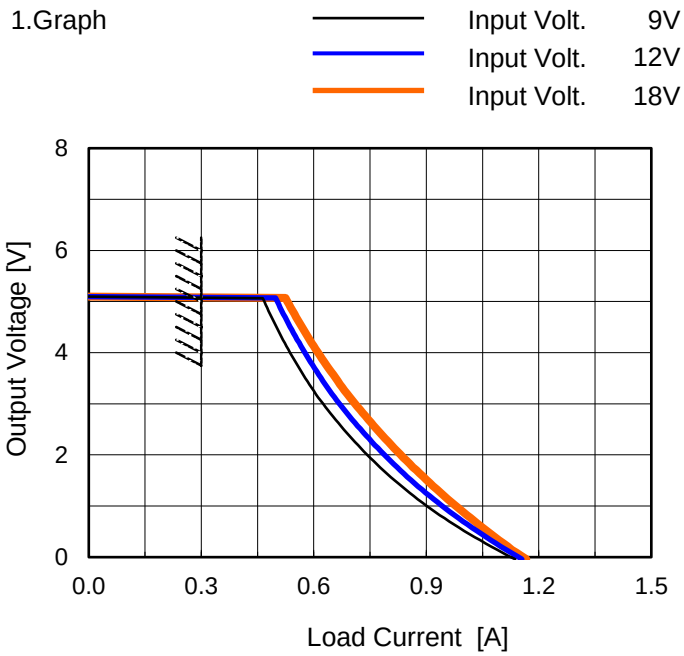
Model	MUS1R51205
Item	Overcurrent Protection
Object	+5V0.3A

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. 9[V]	Input Volt. 12[V]	Input Volt. 18[V]
4.75	0.48	0.52	0.55
4.50	0.50	0.54	0.57
4.00	0.54	0.58	0.61
3.50	0.58	0.62	0.66
3.00	0.62	0.67	0.71
2.50	0.68	0.72	0.77
2.00	0.74	0.79	0.83
1.50	0.82	0.86	0.90
1.00	0.90	0.94	0.98
0.50	1.00	1.03	1.06
0.00	1.14	1.15	1.17
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Model	MUS1R51205	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+5V0.3A	

1.Values

Load 100%

Ambient Temperature[℃]	Output Voltage [V]		
	Input Volt. 9V	Input Volt. 12V	Input Volt. 18V
-40	5.059	5.060	5.061
25	5.098	5.099	5.099
85	5.103	5.103	5.103

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+5V0.3A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-40	7.2	7.3
25	7.3	7.1
85	7.2	7.2

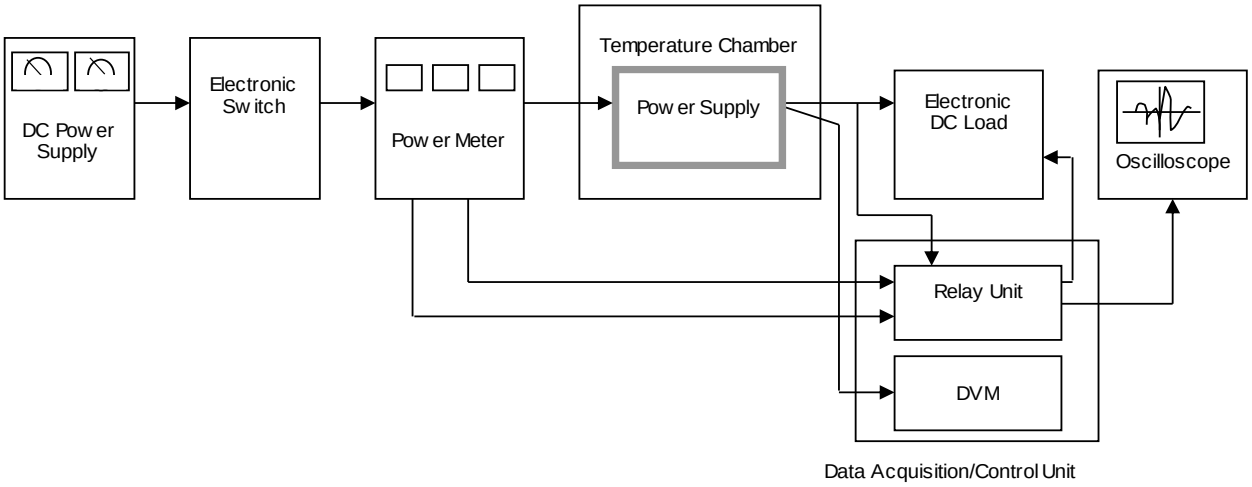

Figure A

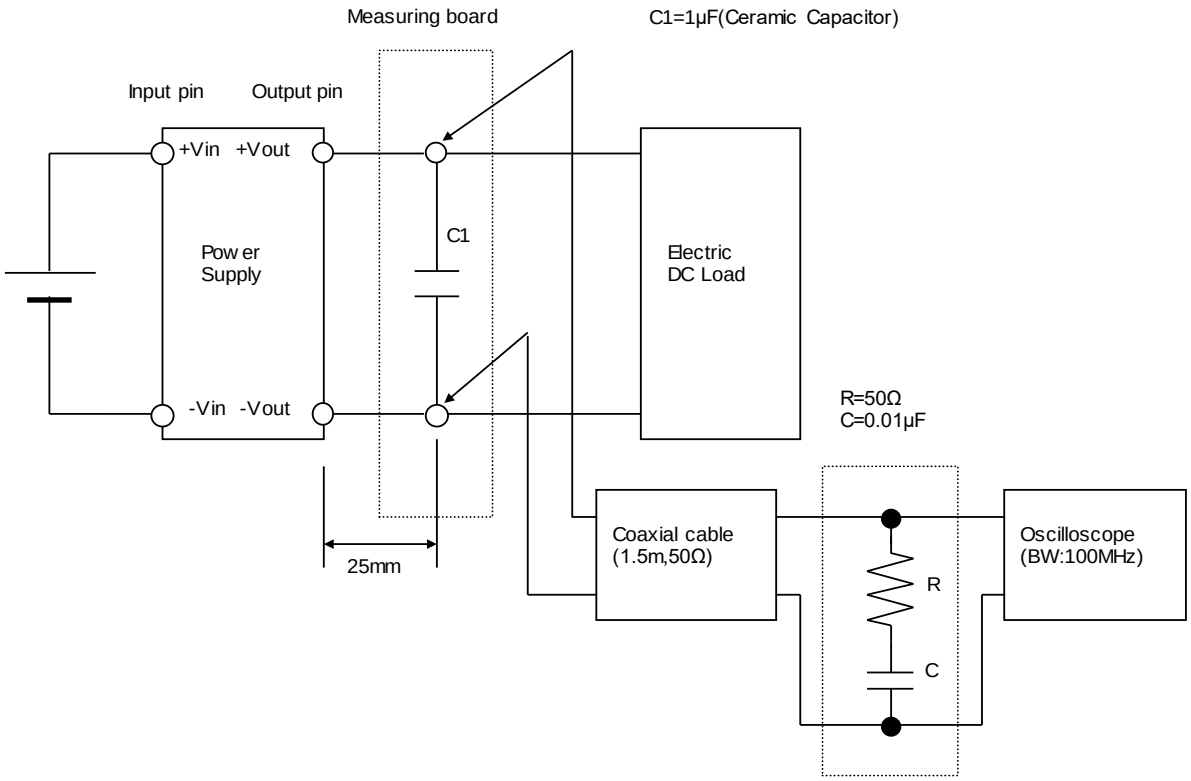

Figure B