参考資料

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TEST DATA OF MHFS34815

Regulated DC Power Supply
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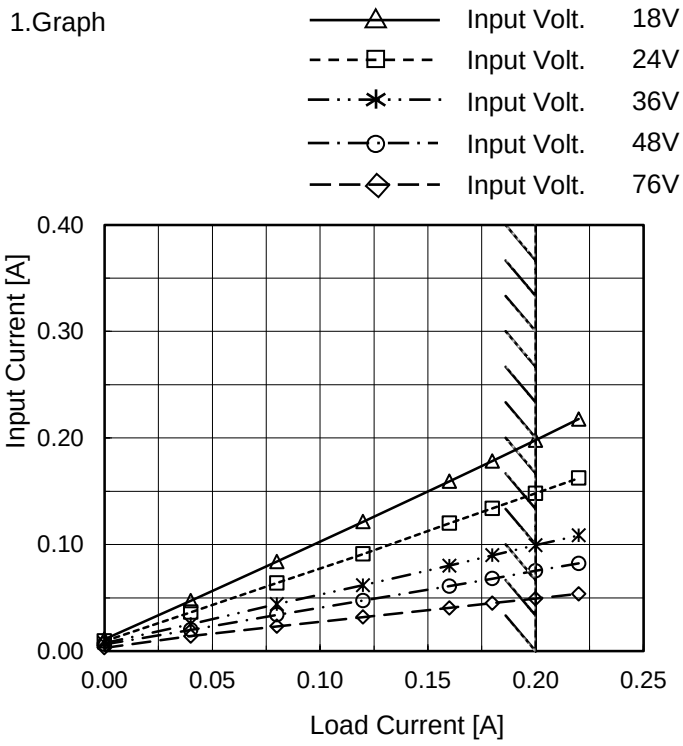
Item	Input Current (by Load Current)
Object	———————

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

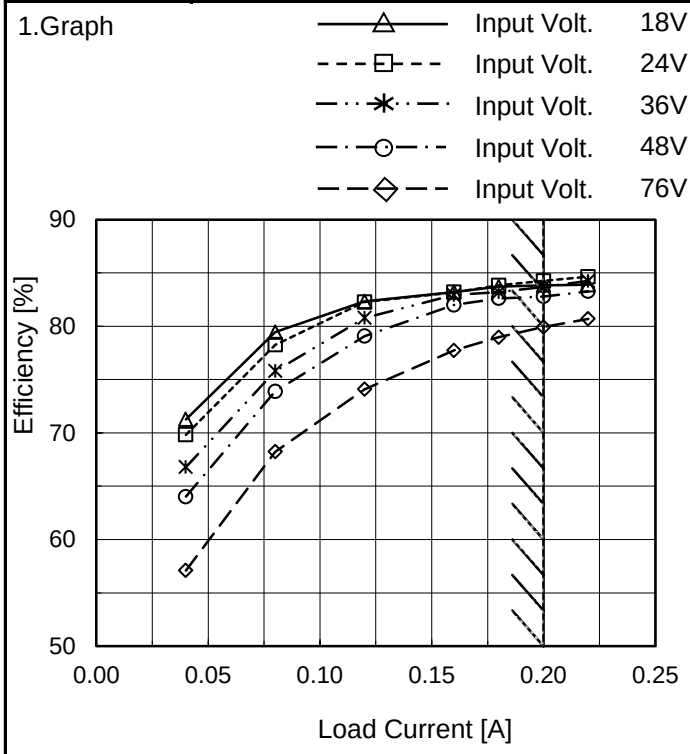
Load Current [A]	Input Current [A]				
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	0.011	0.010	0.008	0.007	0.003
0.04	0.047	0.036	0.025	0.020	0.014
0.08	0.084	0.064	0.044	0.034	0.023
0.12	0.122	0.091	0.062	0.048	0.032
0.16	0.159	0.120	0.080	0.061	0.041
0.18	0.178	0.134	0.090	0.068	0.045
0.20	0.198	0.148	0.099	0.075	0.049
0.22	0.218	0.162	0.109	0.082	0.054
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

COSEL

Model	MHFS34815
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]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	-	-	-	-	-
0.04	71.3	69.8	66.8	64.0	57.1
0.08	79.4	78.3	75.8	73.9	68.2
0.12	82.3	82.3	80.8	79.1	74.1
0.16	83.2	83.2	82.9	82.0	77.7
0.18	83.7	83.8	83.2	82.6	79.0
0.20	83.8	84.2	83.7	82.8	79.9
0.22	83.9	84.6	84.3	83.3	80.7
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

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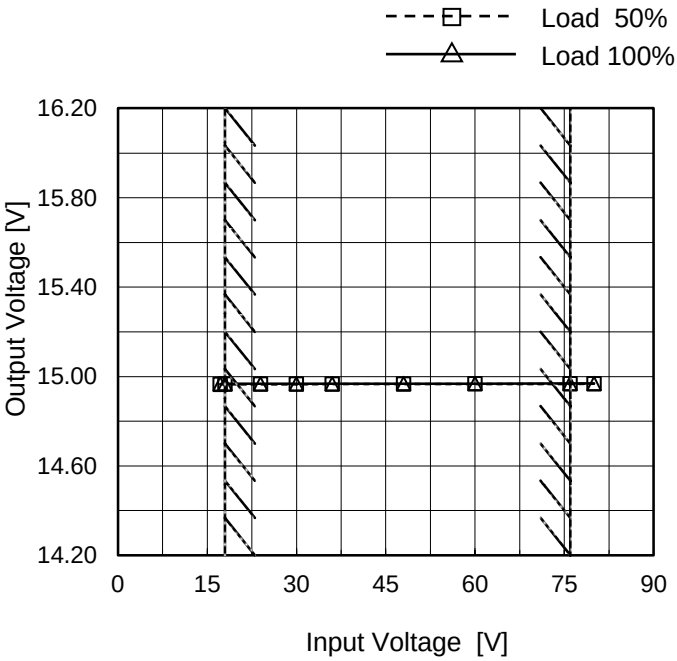
Model	MHFS34815
Item	Line Regulation
Object	+15V0.2A

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%
17.2	14.965	14.967
18.0	14.965	14.968
24.0	14.966	14.968
30.0	14.966	14.968
36.0	14.966	14.968
48.0	14.966	14.968
60.0	14.967	14.968
76.0	14.967	14.969
80.0	14.967	14.969

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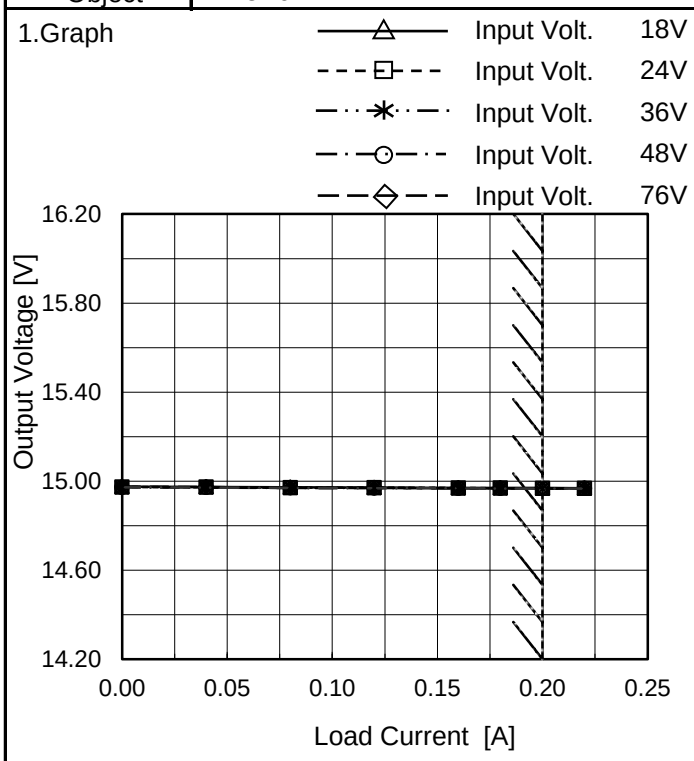
Model	MHFS34815
Item	Load Regulation
Object	+15V0.2A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

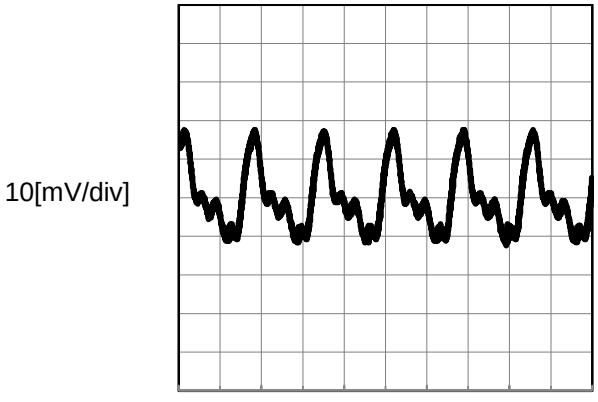
Load Current [A]	Output Voltage [V] Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	14.975	14.974	14.972	14.972	14.975
0.04	14.974	14.973	14.972	14.971	14.974
0.08	14.973	14.971	14.970	14.970	14.970
0.12	14.972	14.970	14.969	14.969	14.969
0.16	14.970	14.969	14.968	14.968	14.968
0.18	14.970	14.968	14.967	14.968	14.969
0.20	14.969	14.968	14.967	14.967	14.968
0.22	14.968	14.967	14.967	14.967	14.968
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

Item	Ripple-Noise
Object	+15V0.2A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 48V
Load 100%



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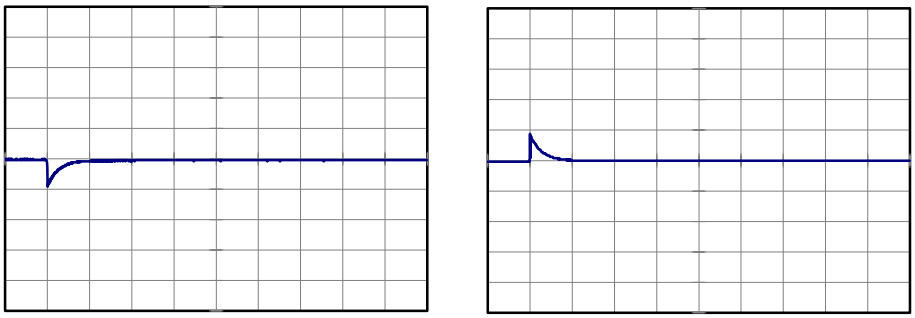
Model	MHFS34815
Item	Dynamic Load Response
Object	+15V0.2A

Temperature 25°C
Testing Circuitry Figure A

Input Volt. 48 V
Cycle 100 ms

Min.Load (0A)←→
Load 100% (0.2A)

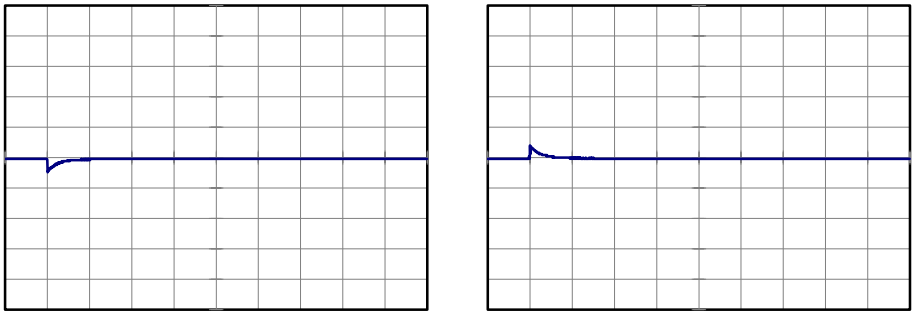


200 mV/div

4 ms/div

4 ms/div

Min.Load (0A)←→
Load 50% (0.1A)



200 mV/div

4 ms/div

4 ms/div

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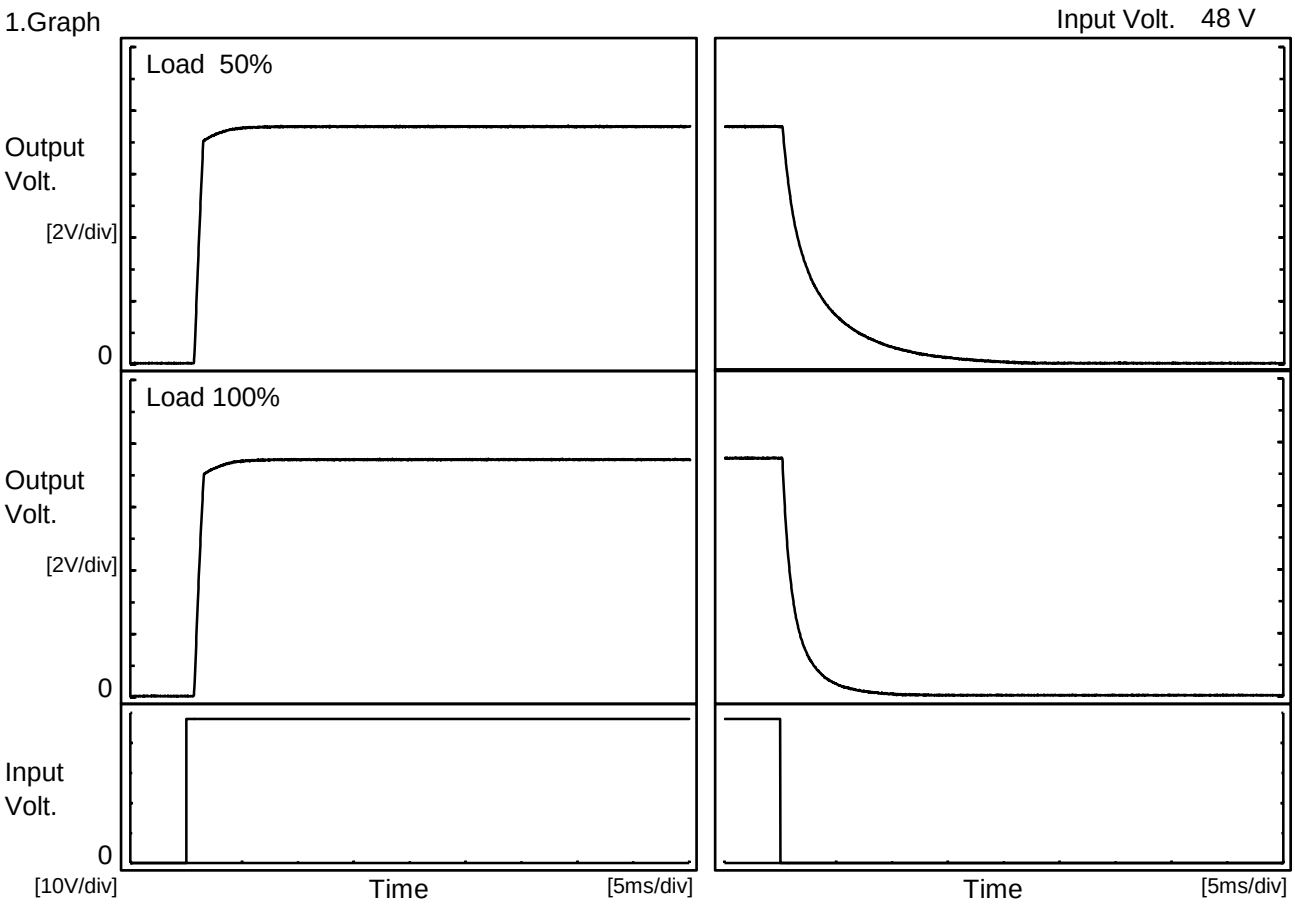
Model	MHFS34815	
Item	Rise and Fall Time	Temperature 25°C Testing Circuitry Figure A
Object	+15V0.2A	

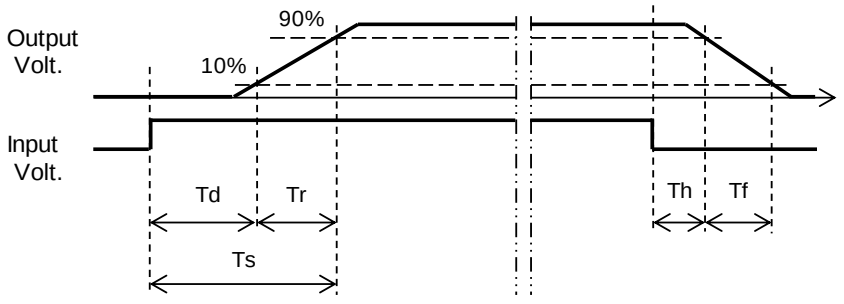
1.Graph



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	0.8	0.7	1.5	0.4	7.8
100 %	0.8	0.8	1.6	0.3	3.2



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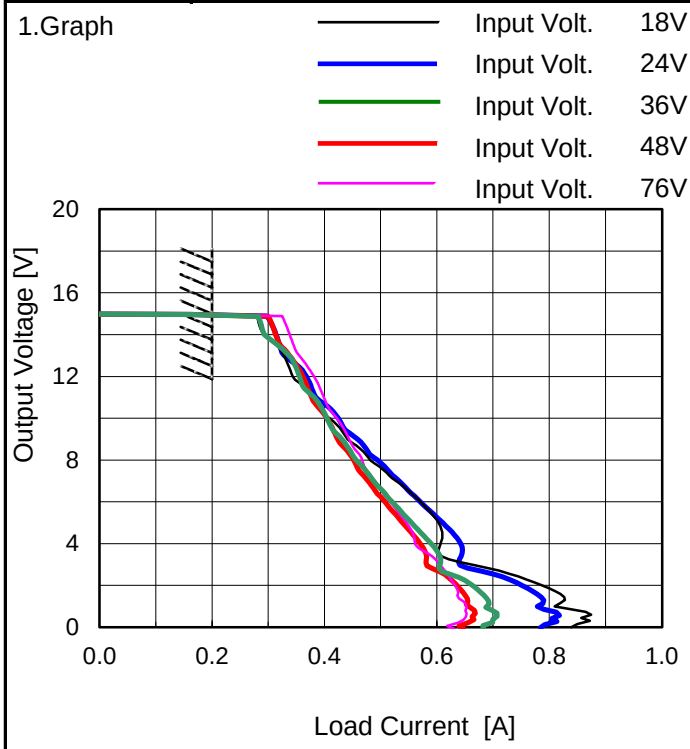
Model	MHFS34815
Item	Overcurrent Protection
Object	+15V0.2A

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]	Input Volt. 48[V]	Input Volt. 76[V]
14.3	0.286	0.310	0.289	0.309	0.334
13.5	0.313	0.319	0.313	0.319	0.344
12.0	0.342	0.368	0.354	0.359	0.381
10.5	0.390	0.406	0.394	0.388	0.406
9.0	0.438	0.453	0.427	0.422	0.442
7.5	0.504	0.511	0.472	0.461	0.473
6.0	0.566	0.566	0.516	0.505	0.514
4.5	0.610	0.627	0.571	0.554	0.557
3.0	0.642	0.639	0.607	0.581	0.603
1.5	0.820	0.779	0.684	0.651	0.637
0.0	0.839	0.784	0.682	0.647	0.632
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COSEL

Model	MHFS34815	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+15V0.2A	

1.Values

Ambient Temperature[℃]	Output Voltage [V]				
	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V	Input Volt. 48V	Input Volt. 76V
-40	14.858	14.859	14.860	14.862	14.863
25	14.964	14.965	14.965	14.965	14.967
75	14.990	14.990	14.990	14.991	14.992

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+15V0.2A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-40	14.5	14.6
25	14.3	14.3
75	13.8	13.9

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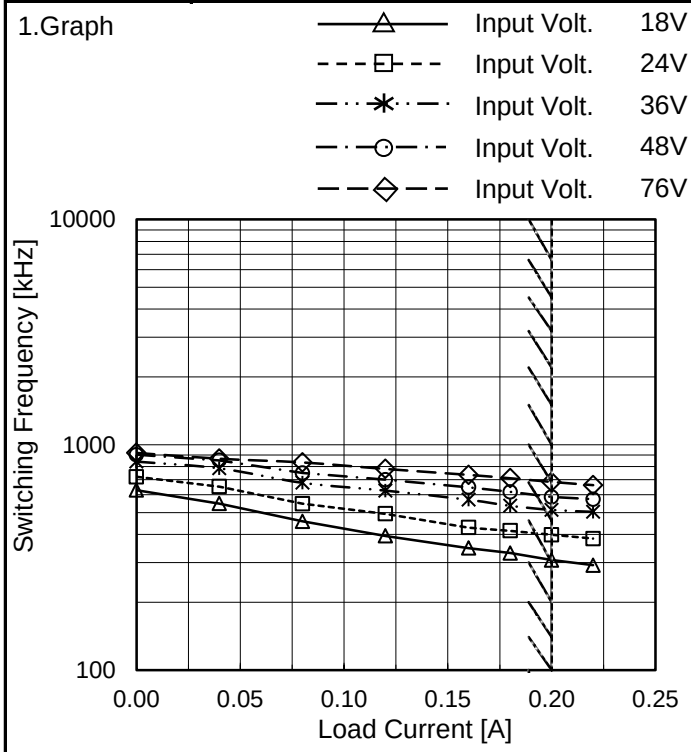
Model	MHFS34815
Item	Switching frequency (by Load Current)
Object	+15V0.2A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

When load current is low, MH operates intermittently, so switching frequency would not become constant.

2.Values

Load Current [A]	Switching Frequency [kHz]				
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	629	720	842	904	920
0.04	548	653	786	854	867
0.08	457	547	678	750	835
0.12	394	494	626	699	781
0.16	348	429	570	648	735
0.18	331	415	536	618	710
0.20	308	398	514	587	684
0.22	292	383	504	573	662
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--	-	-	-	-	-

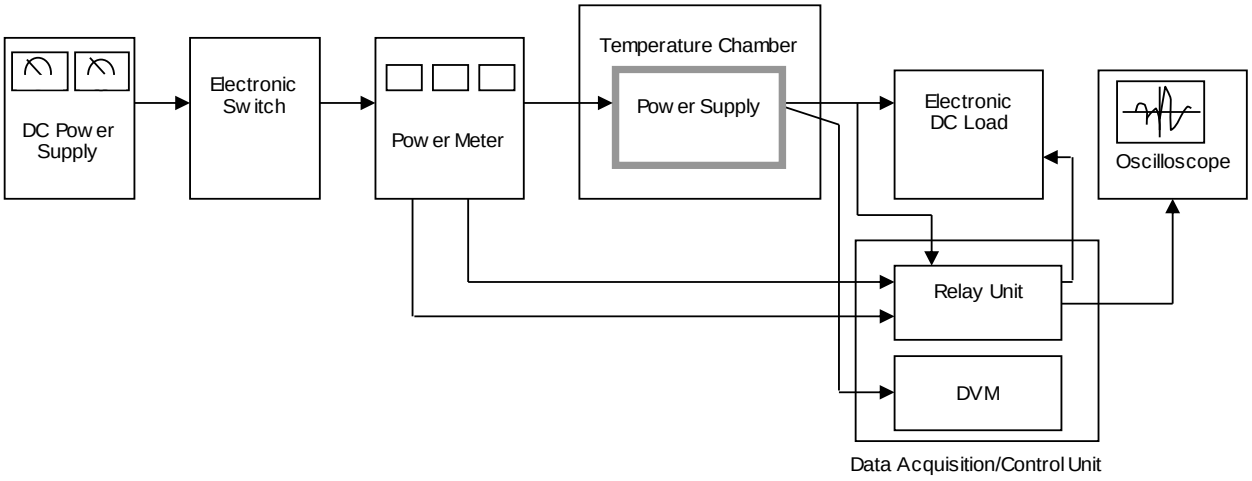

Figure A

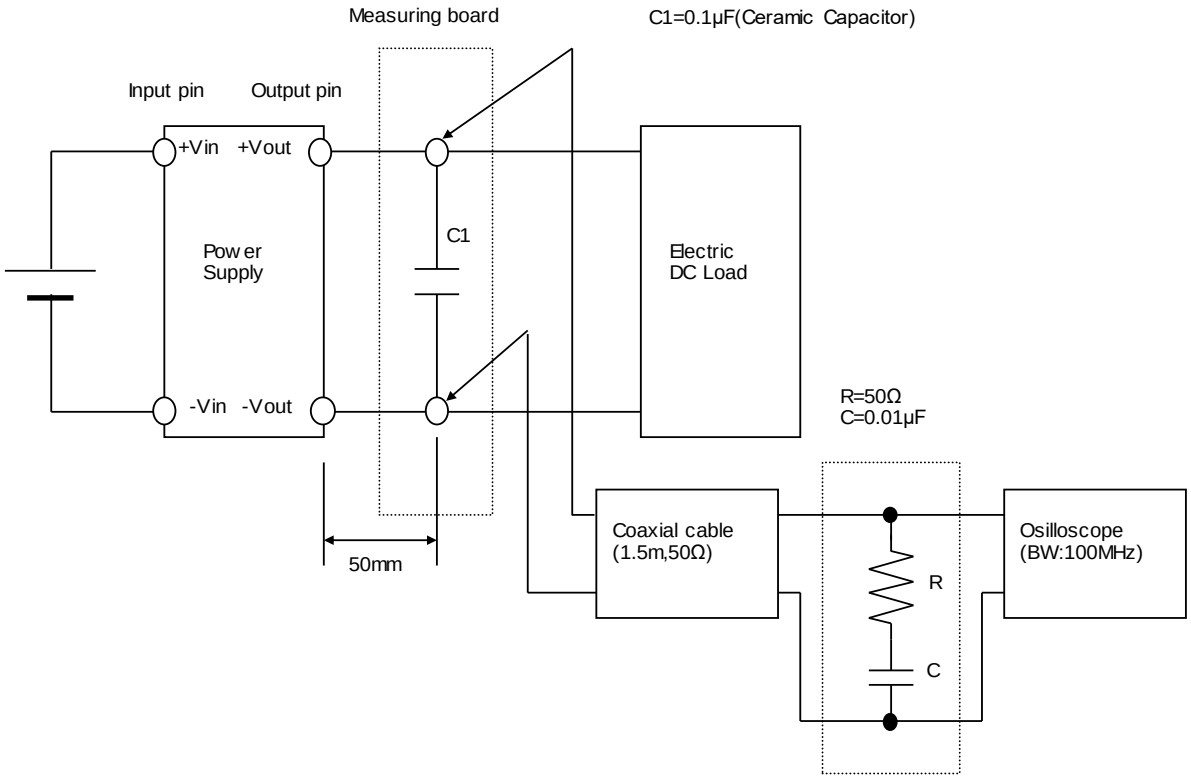

Figure B