参考資料

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TEST DATA OF MHFS3483R3

Regulated DC Power Supply
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Object	————————

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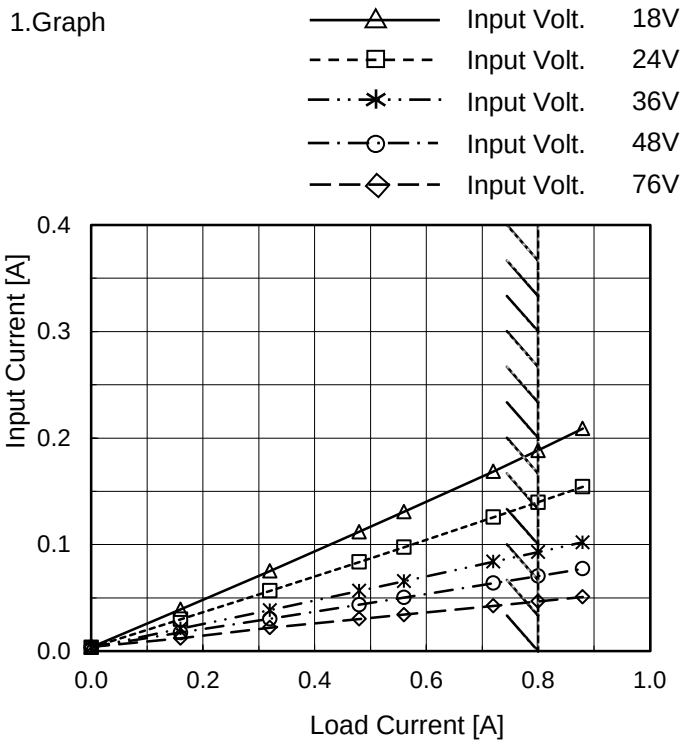


Note: Slanted line shows the range of the rated load current.

2.Values

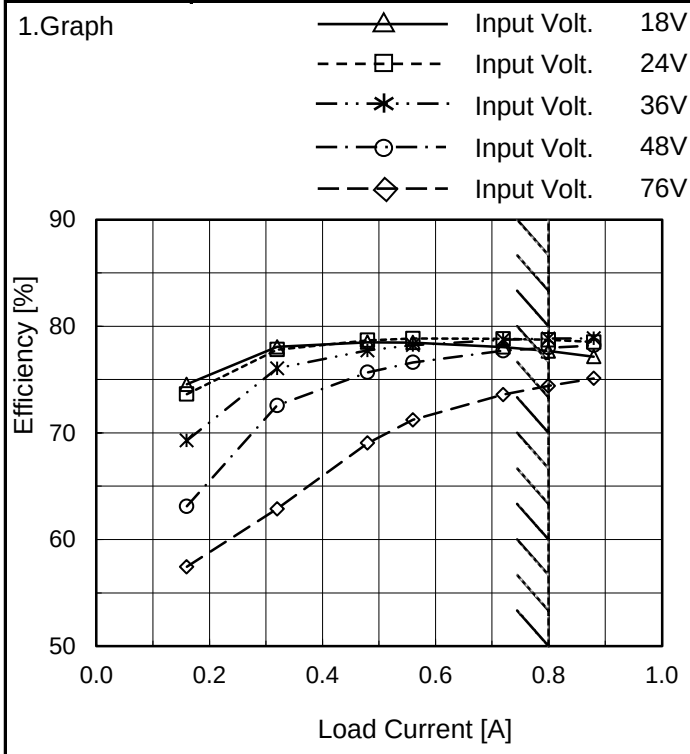
Load Current [A]	Input Current [A]				
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	0.004	0.004	0.004	0.004	0.004
0.16	0.039	0.030	0.021	0.017	0.012
0.32	0.075	0.057	0.039	0.030	0.022
0.48	0.112	0.084	0.057	0.044	0.030
0.56	0.131	0.098	0.066	0.050	0.034
0.72	0.169	0.126	0.084	0.064	0.043
0.80	0.188	0.140	0.093	0.071	0.047
0.88	0.209	0.154	0.102	0.077	0.051
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

COSEL

Model	MHFS3483R3
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	-	-	-	-	-
0.16	74.6	73.6	69.3	63.1	57.4
0.32	78.1	77.8	76.0	72.6	62.9
0.48	78.5	78.7	77.7	75.7	69.0
0.56	78.5	78.8	78.2	76.6	71.2
0.72	78.0	78.8	78.7	77.7	73.6
0.80	77.7	78.7	78.8	78.0	74.4
0.88	77.2	78.5	78.9	78.2	75.1
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

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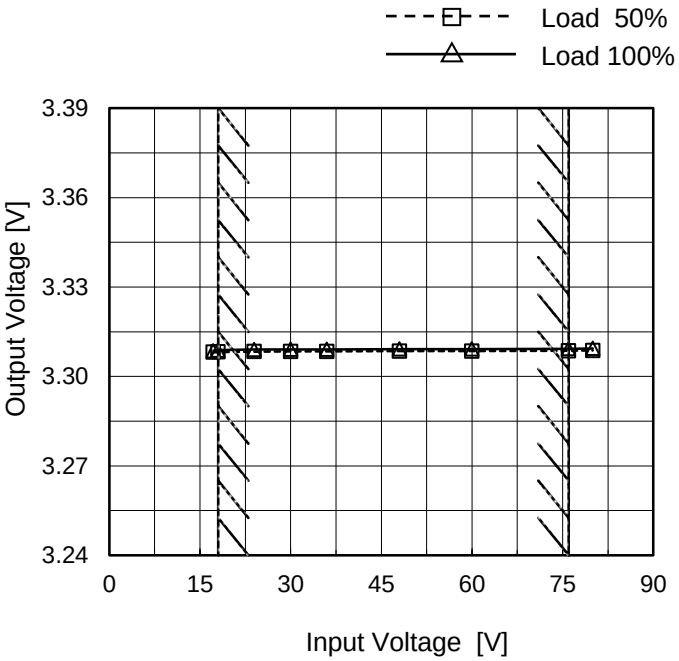
Model	MHFS3483R3
Item	Line Regulation
Object	+3.3V0.8A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

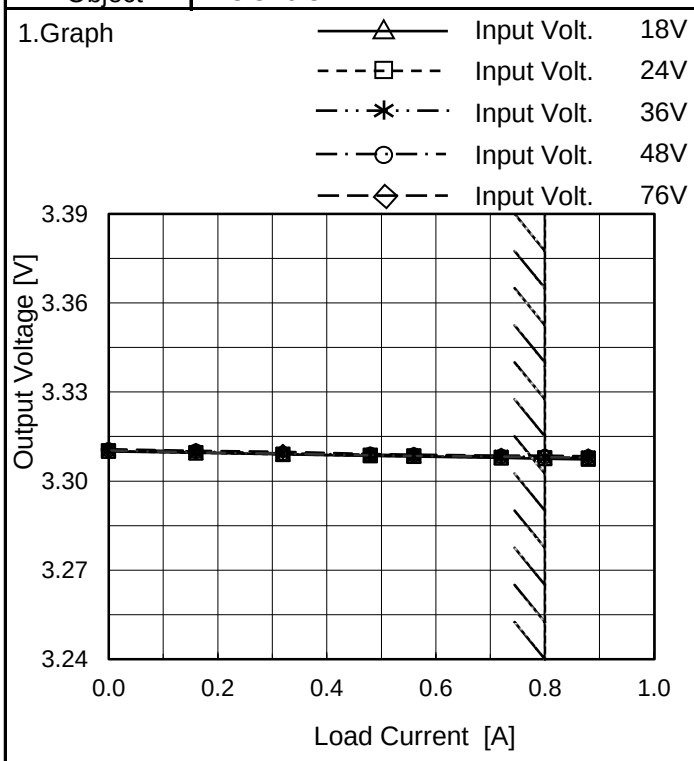
Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
17.2	3.308	3.309
18.0	3.308	3.309
24.0	3.308	3.309
30.0	3.308	3.309
36.0	3.308	3.309
48.0	3.309	3.309
60.0	3.309	3.309
76.0	3.309	3.309
80.0	3.309	3.309

COSEL

Model	MHFS3483R3
Item	Load Regulation
Object	+3.3V0.8A

Temperature 25°C
Testing Circuitry Figure A

1.Graph



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

2.Values

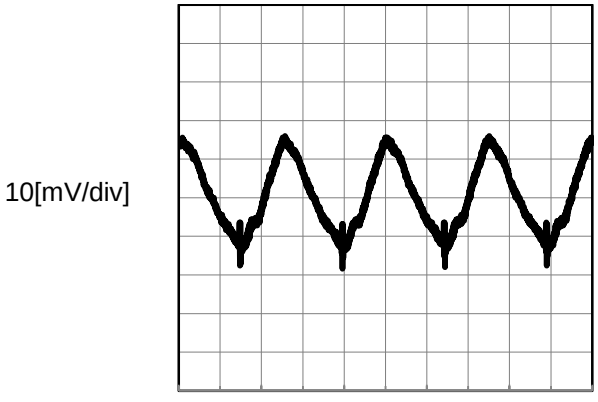
Load Current [A]	Output Voltage [V] Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	Input Volt. 48[V]	Input Volt. 76[V]
0.00	3.310	3.310	3.310	3.311	3.311
0.16	3.310	3.310	3.310	3.310	3.310
0.32	3.309	3.309	3.309	3.309	3.310
0.48	3.309	3.309	3.309	3.309	3.309
0.56	3.308	3.308	3.309	3.309	3.309
0.72	3.308	3.308	3.308	3.308	3.309
0.80	3.308	3.308	3.308	3.308	3.309
0.88	3.307	3.308	3.308	3.308	3.308
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

Item	Ripple-Noise
Object	+3.3V0.8A

Temperature 25°C
Testing Circuitry Figure B

1.Graph

Input Voltage 48V
Load 100%



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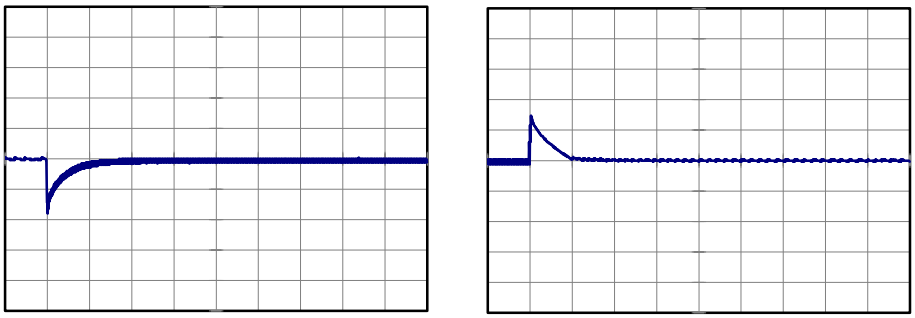
Model	MHFS3483R3
Item	Dynamic Load Response
Object	+3.3V0.8A

Temperature 25°C
Testing Circuitry Figure A

Input Volt. 48 V
Cycle 100 ms

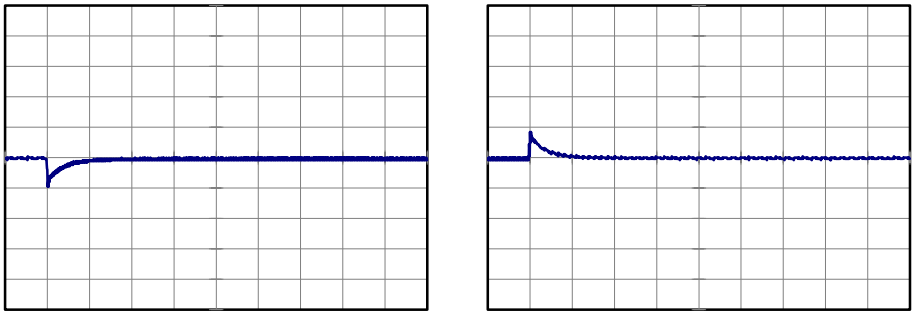
Min.Load (0A)←→
Load 100% (0.8A)



100 mV/div

1 ms/div 1 ms/div

Min.Load (0A)←→
Load 50% (0.4A)



100 mV/div

1 ms/div 1 ms/div

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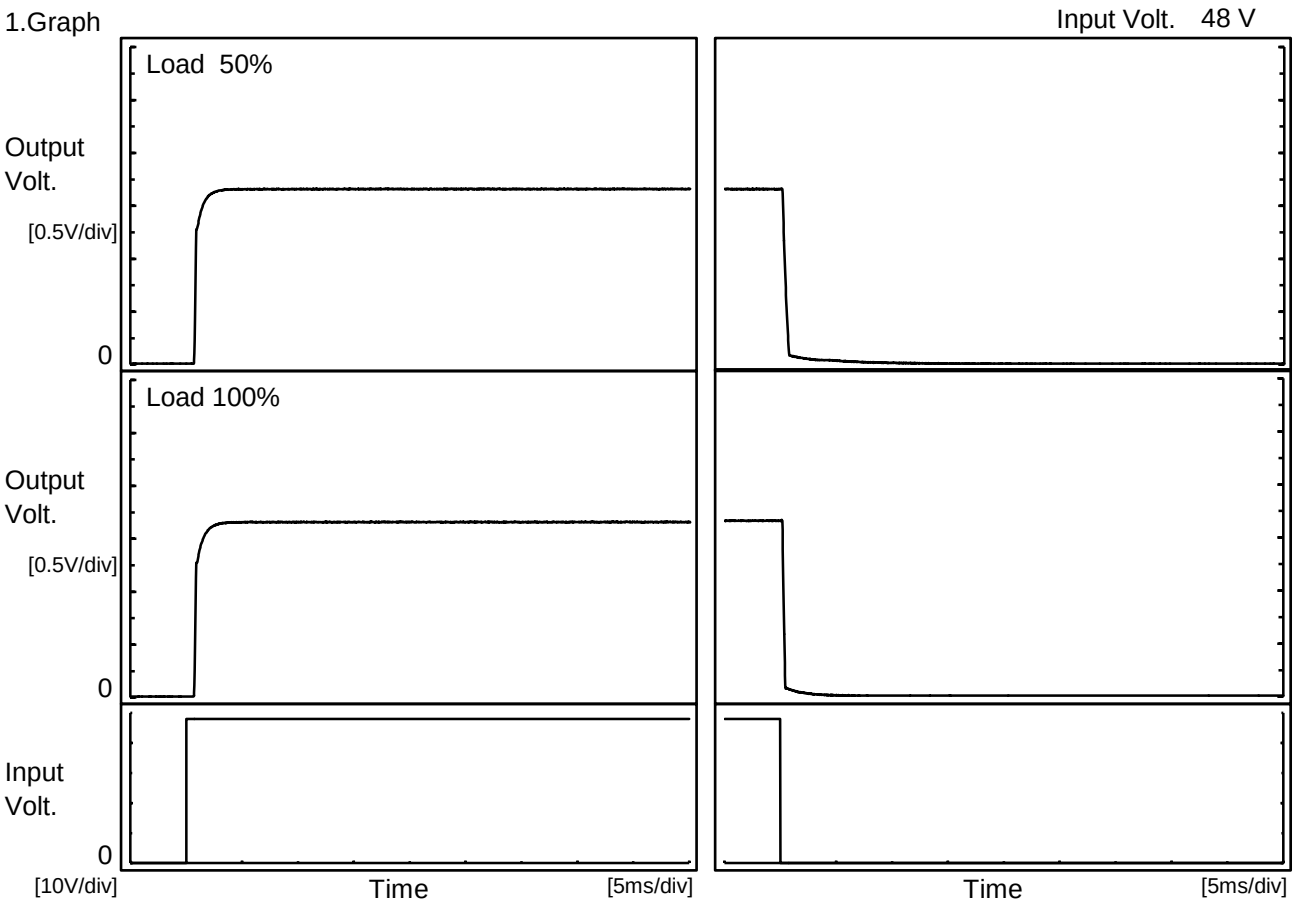
Model	MHFS3483R3	
Item	Rise and Fall Time	Temperature 25°C Testing Circuitry Figure A
Object	+3.3V0.8A	

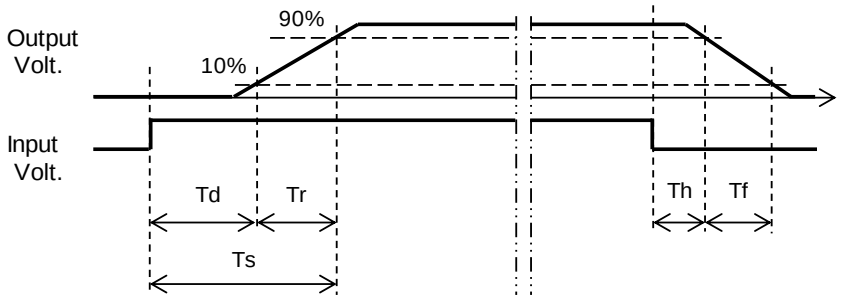
1.Graph



2.Values

[ms]

Load \ Time	Td	Tr	Ts	Th	Tf
50 %	0.8	0.7	1.5	0.2	0.5
100 %	0.8	0.8	1.6	0.2	0.2



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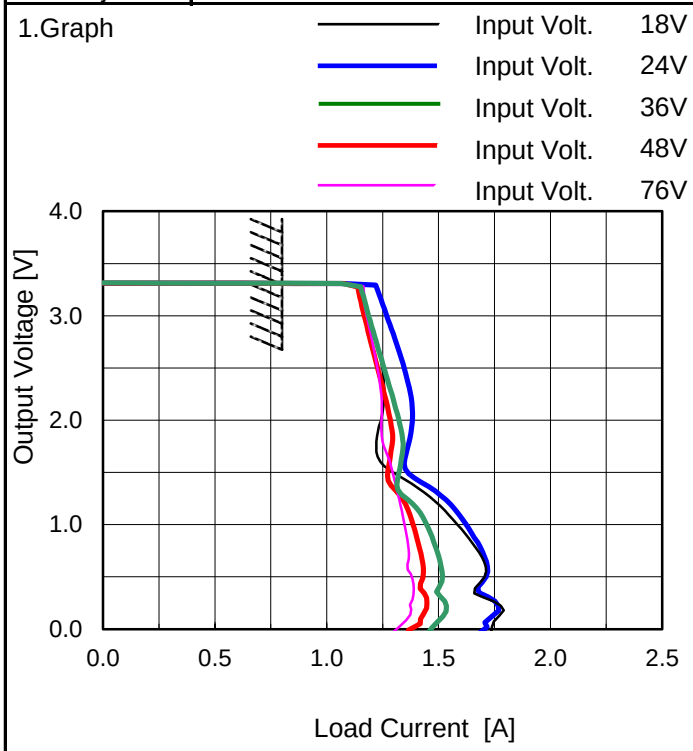
Model	MHFS3483R3
Item	Overcurrent Protection
Object	+3.3V0.8A

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]
3.14	1.163	1.243	1.170	1.153	1.168
2.97	1.186	1.267	1.188	1.169	1.180
2.64	1.233	1.319	1.232	1.208	1.212
2.31	1.257	1.369	1.278	1.249	1.240
1.98	1.242	1.384	1.322	1.284	1.245
1.65	1.227	1.355	1.337	1.285	1.273
1.32	1.408	1.485	1.318	1.308	1.315
0.99	1.585	1.621	1.443	1.385	1.349
0.66	1.694	1.706	1.501	1.425	1.366
0.33	1.660	1.681	1.492	1.437	1.389
0.00	1.737	1.683	1.453	1.365	1.301
--	-	-	-	-	-

COSEL

Model	MHFS3483R3	
Item	Ambient Temperature Drift	Testing Circuitry Figure A
Object	+3.3V0.8A	

1.Values

Ambient Temperature[℃]	Output Voltage [V]				
	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V	Input Volt. 48V	Input Volt. 76V
-40	3.298	3.299	3.299	3.299	3.299
25	3.307	3.308	3.308	3.308	3.308
75	3.316	3.317	3.317	3.317	3.317

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	+3.3V0.8A	

1.Values

Ambient Temperature[℃]	Input Voltage [V]	
	Load 50%	Load 100%
-40	14.5	14.8
25	14.4	14.5
75	14.0	14.1

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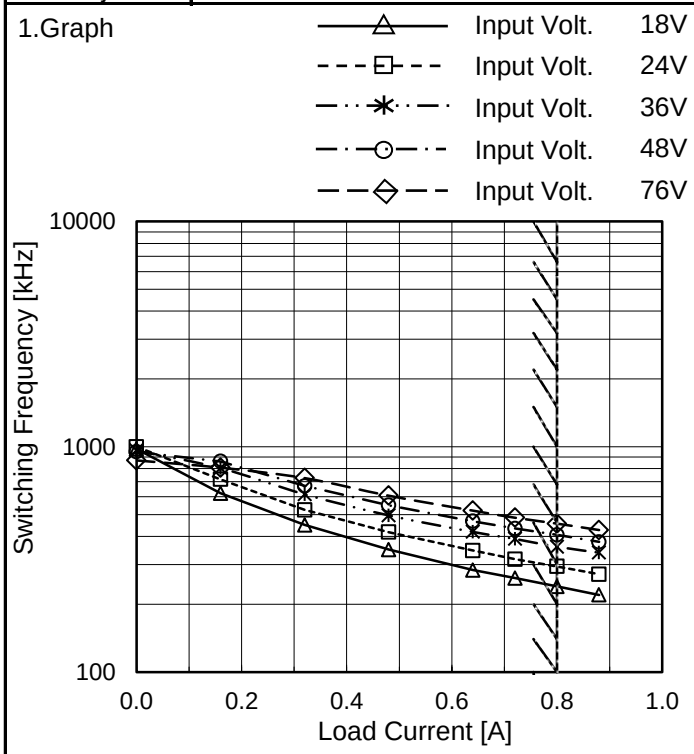
Model	MHFS3483R3
Item	Switching frequency (by Load Current)
Object	+3.3V0.8A

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	977	1000	962	950	870
0.16	622	717	804	861	808
0.32	450	525	615	670	726
0.48	350	418	496	550	607
0.64	283	346	419	467	521
0.72	261	317	390	434	484
0.80	240	295	360	406	456
0.88	220	272	339	378	427
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--	-	-	-	-	-
--	-	-	-	-	-

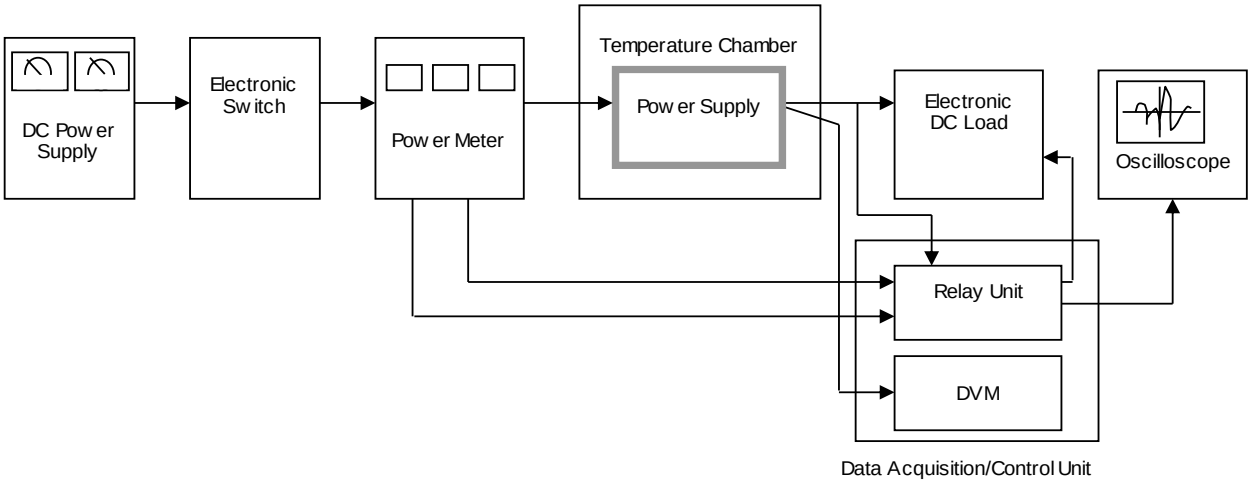

Figure A

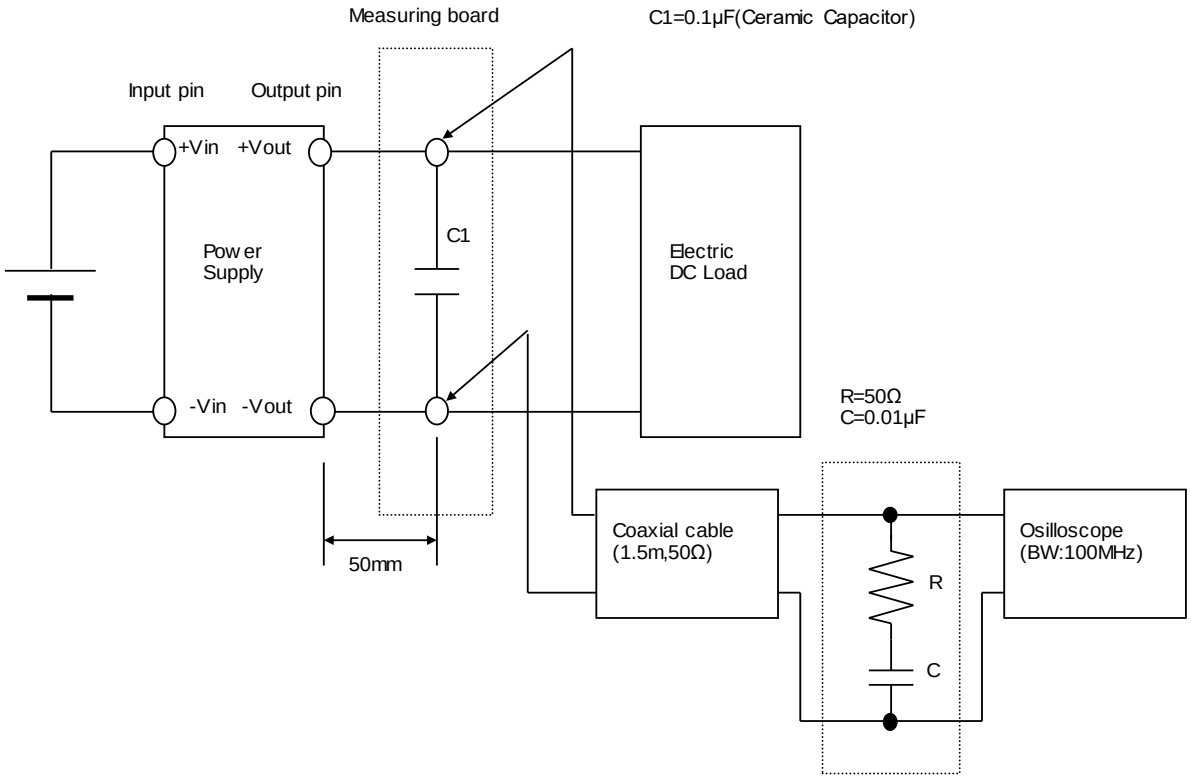

Figure B