



TEST DATA OF MHFS34812

Regulated DC Power Supply
June 2, 2020

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COSEL CO.,LTD.



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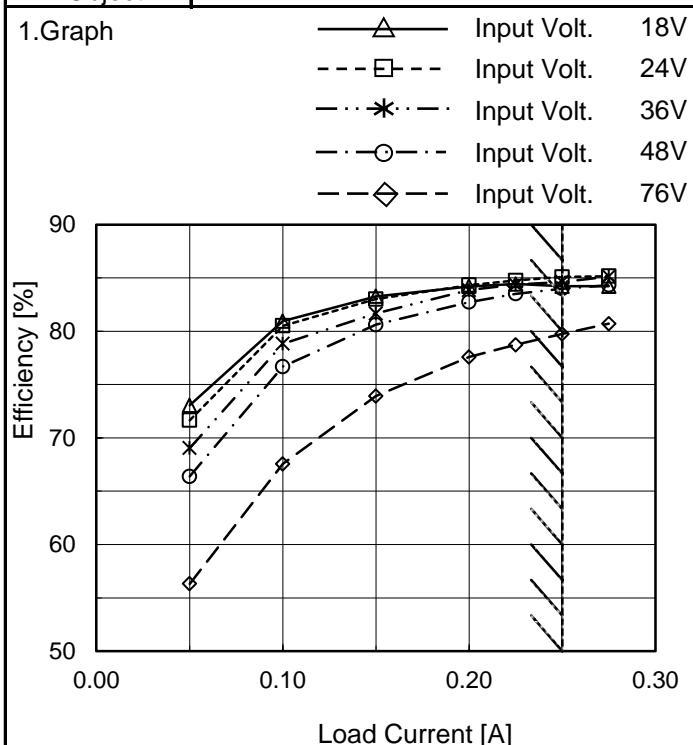
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Model	MHFS34812	Temperature Testing Circuitry	25°C Figure A																																																																													
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Note: Slanted line shows the range of the rated load current.

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Model	MHFS34812
Item	Efficiency (by Load Current)
Object	_____


 Temperature 25°C
 Testing Circuitry Figure A

2.Values

Load Current [A]	Efficiency [%]				
	18[V]	24[V]	36[V]	48[V]	76[V]
0.000	-	-	-	-	-
0.050	73.0	71.6	69.0	66.4	56.3
0.100	80.9	80.5	78.8	76.7	67.6
0.150	83.3	83.0	81.7	80.6	73.9
0.200	84.2	84.3	83.9	82.7	77.6
0.225	84.4	84.8	84.4	83.5	78.7
0.250	84.2	85.1	84.6	84.0	79.7
0.275	84.2	85.2	85.1	84.3	80.7
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

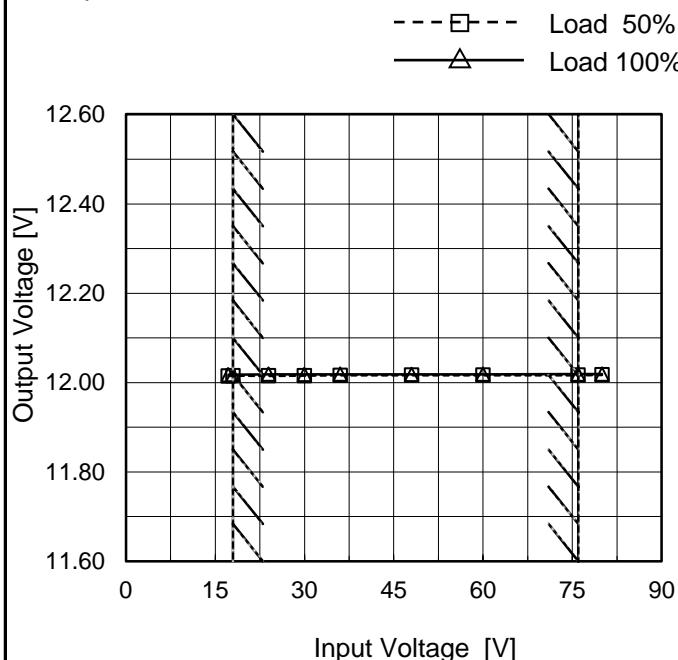
Note: Slanted line shows the range of the rated load current.

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Model	MHFS34812
Item	Line Regulation
Object	+12V0.25A

Temperature 25°C
Testing Circuitry Figure A

1.Graph

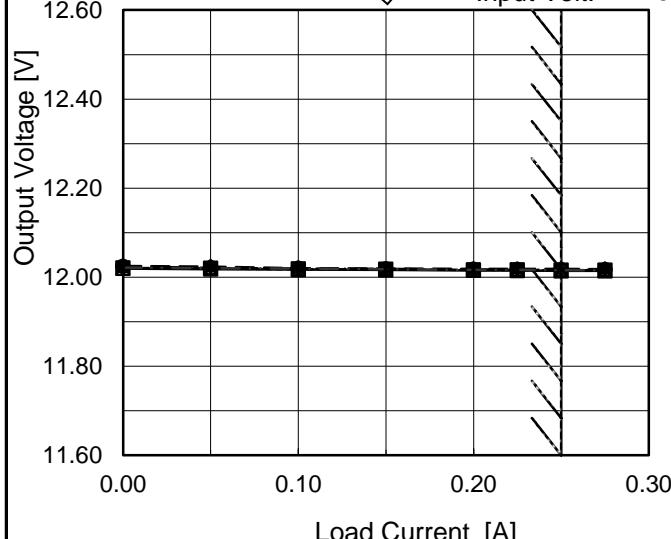
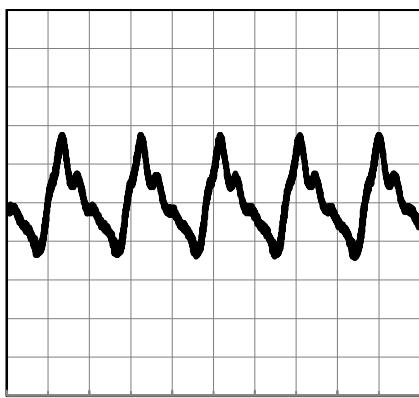


2.Values

Input Voltage [V]	Output Voltage [V]	
	Load 50%	Load 100%
17.2	12.015	12.018
18.0	12.015	12.018
24.0	12.015	12.019
30.0	12.016	12.019
36.0	12.016	12.019
48.0	12.017	12.019
60.0	12.016	12.019
76.0	12.017	12.019
80.0	12.017	12.019

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

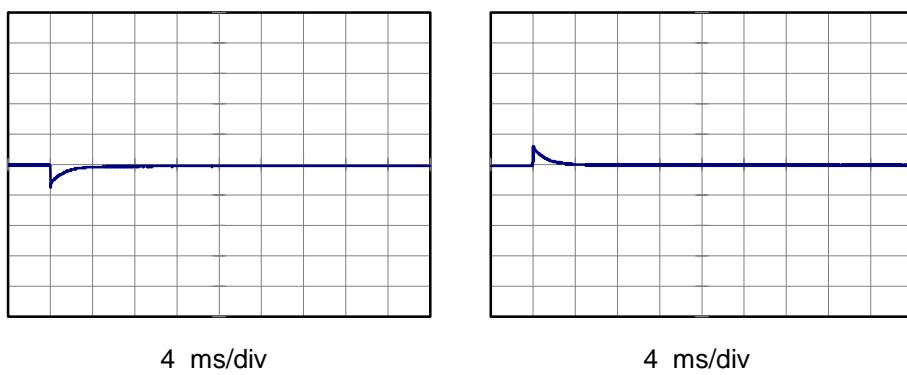
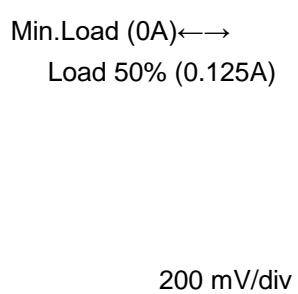
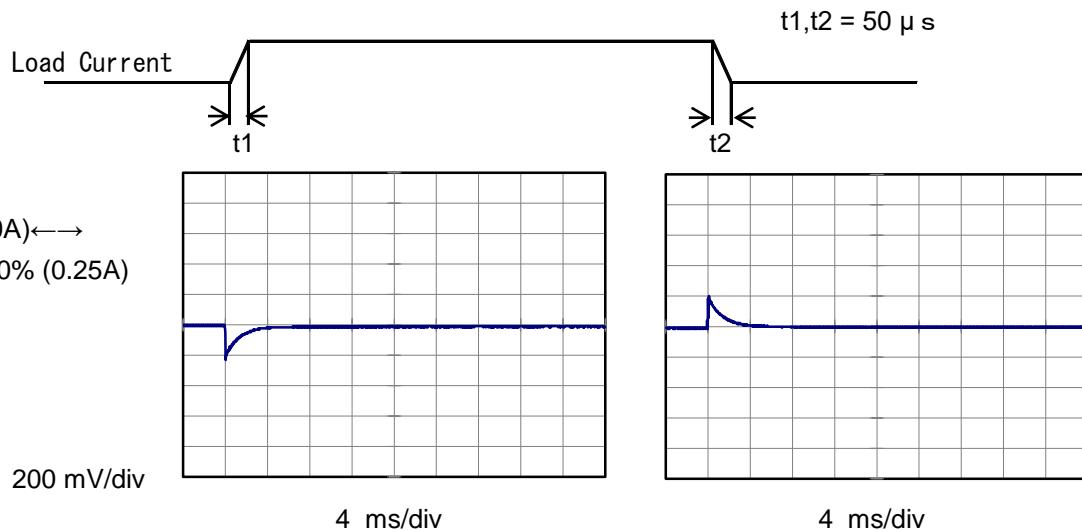
COSEL

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Item	Ripple-Noise	Temperature	25°C																																																																													
Object	+12V0.25A	Testing Circuitry	Figure B																																																																													
1.Graph		Input Voltage 48V Load 100%																																																																														
																																																																																

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Model	MHFS34812	Temperature Testing Circuitry Figure A
Item	Dynamic Load Response	
Object	+12V0.25A	

Input Volt. 48 V
 Cycle 100 ms

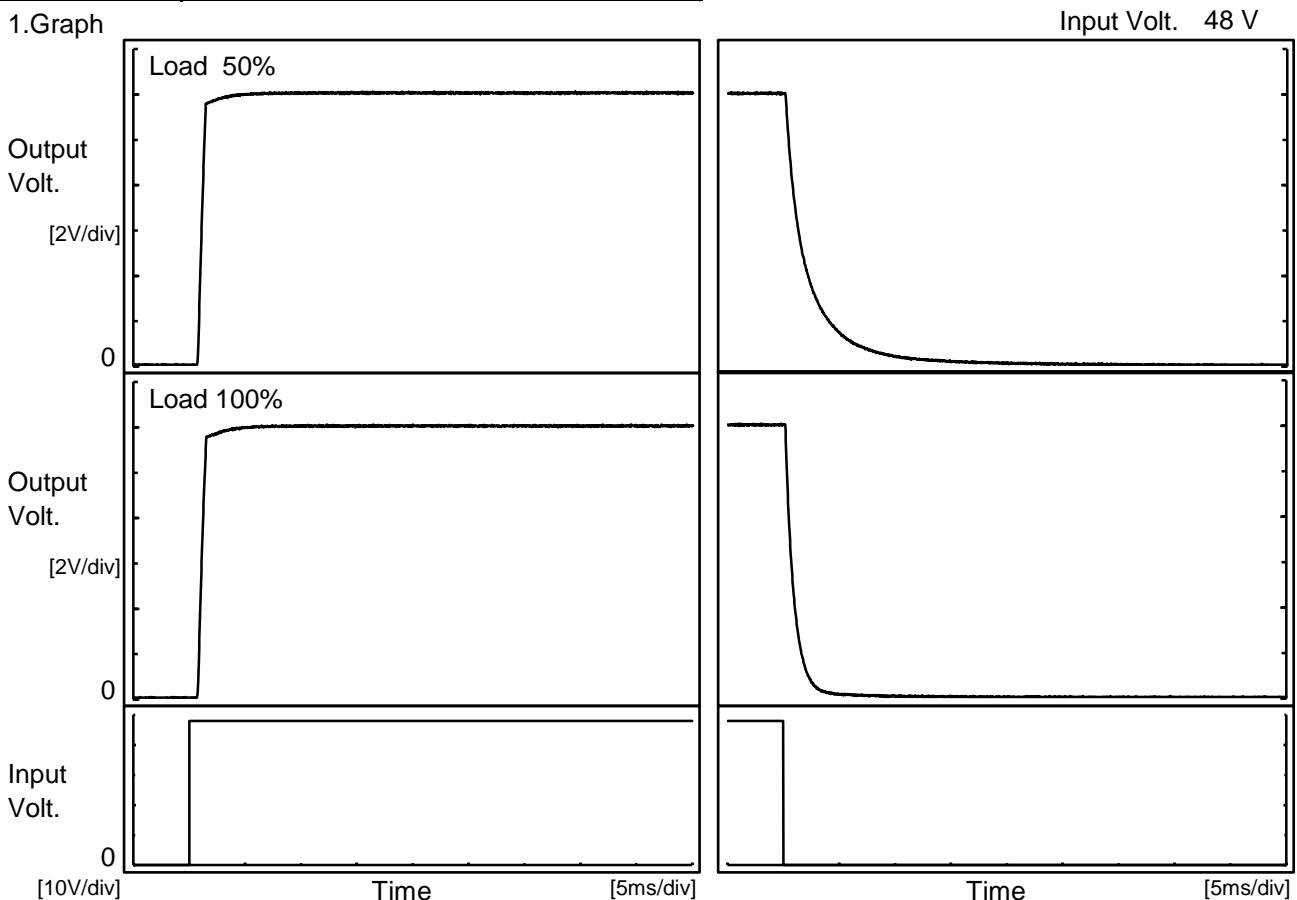


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Model	MHFS34812
Item	Rise and Fall Time
Object	+12V0.25A

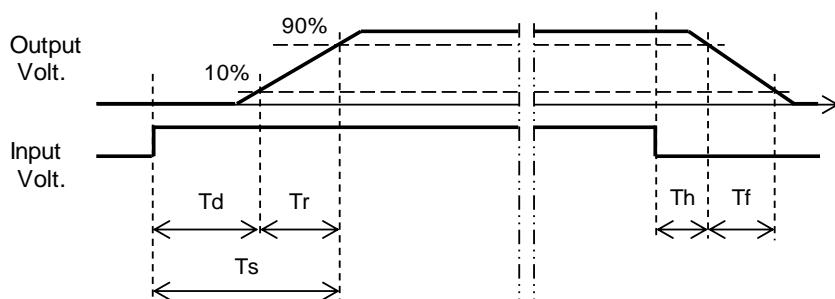
Temperature 25°C
Testing Circuitry Figure A

1. Graph



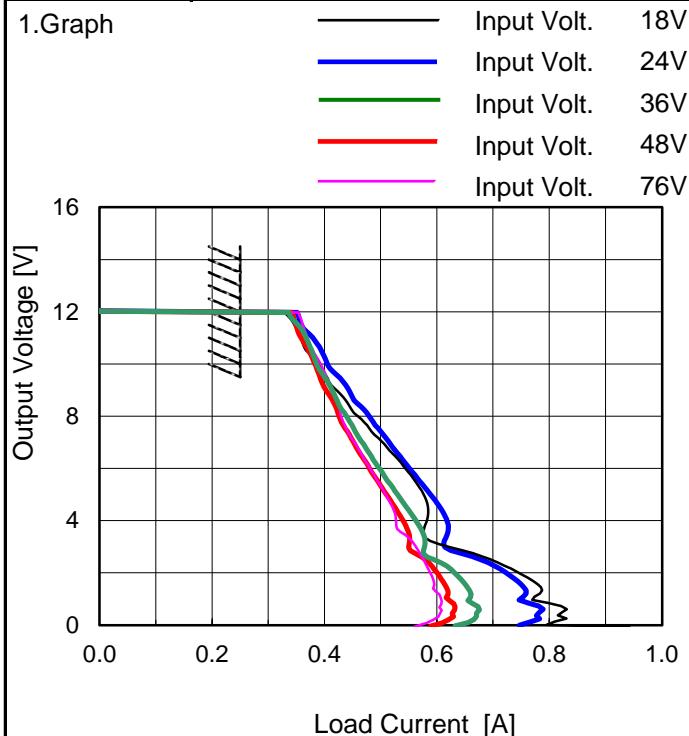
2. Values

Load	Time	Td	Tr	Ts	Th	Tf
50 %		0.8	0.6	1.4	0.3	5.2
100 %		0.8	0.7	1.5	0.3	1.8



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Model	MHFS34812
Item	Overcurrent Protection
Object	+12V0.25A


 Temperature 25°C
 Testing Circuitry Figure A

2.Values

Output Voltage [V]	Load Current [A]				
	18[V]	24[V]	36[V]	48[V]	76[V]
11.4	0.350	0.362	0.358	0.351	0.364
10.8	0.360	0.383	0.370	0.362	0.371
9.6	0.400	0.416	0.394	0.389	0.400
8.4	0.442	0.458	0.425	0.418	0.424
7.2	0.489	0.505	0.458	0.445	0.445
6.0	0.541	0.547	0.495	0.478	0.479
4.8	0.579	0.592	0.534	0.514	0.512
3.6	0.577	0.621	0.572	0.547	0.529
2.4	0.695	0.678	0.596	0.581	0.577
1.2	0.784	0.759	0.659	0.620	0.598
0.0	0.943	0.747	0.633	0.589	0.561
--	-	-	-	-	-

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



Model	MHFS34812	Testing Circuitry Figure A			
Item	Ambient Temperature Drift				
Object	+12V0.25A				

1.Values

Ambient Temperature[°C]	Output Voltage [V]				
	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V	Input Volt. 48V	Input Volt. 76V
-40	11.914	11.916	11.917	11.919	11.920
25	12.013	12.014	12.014	12.015	12.016
75	12.046	12.047	12.047	12.047	12.048

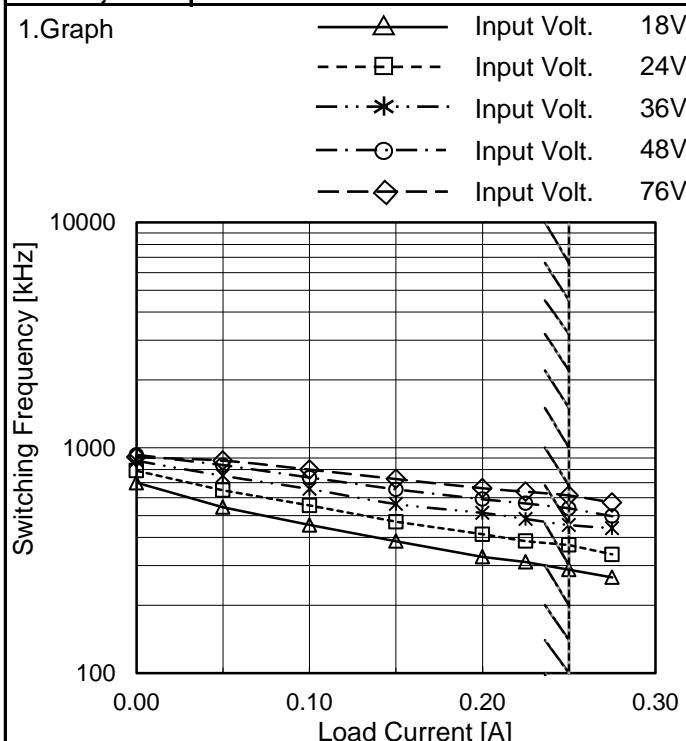
Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A			
Object	+12V0.25A				

1.Values

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

COSEL

Model	MHFS34812
Item	Switching frequency (by Load Current)
Object	+12V0.25A



Temperature 25°C
Testing Circuitry Figure A

2.Values

Load Current [A]	Switching Frequency [kHz]				
	18[V]	24[V]	36[V]	48[V]	76[V]
0.000	699	791	876	931	908
0.050	544	648	751	838	877
0.100	454	555	656	738	800
0.150	385	469	563	654	727
0.200	328	413	514	591	662
0.225	311	385	483	567	638
0.250	288	370	454	539	614
0.275	266	336	440	497	571
--	-	-	-	-	-
--	-	-	-	-	-
--	-	-	-	-	-

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.

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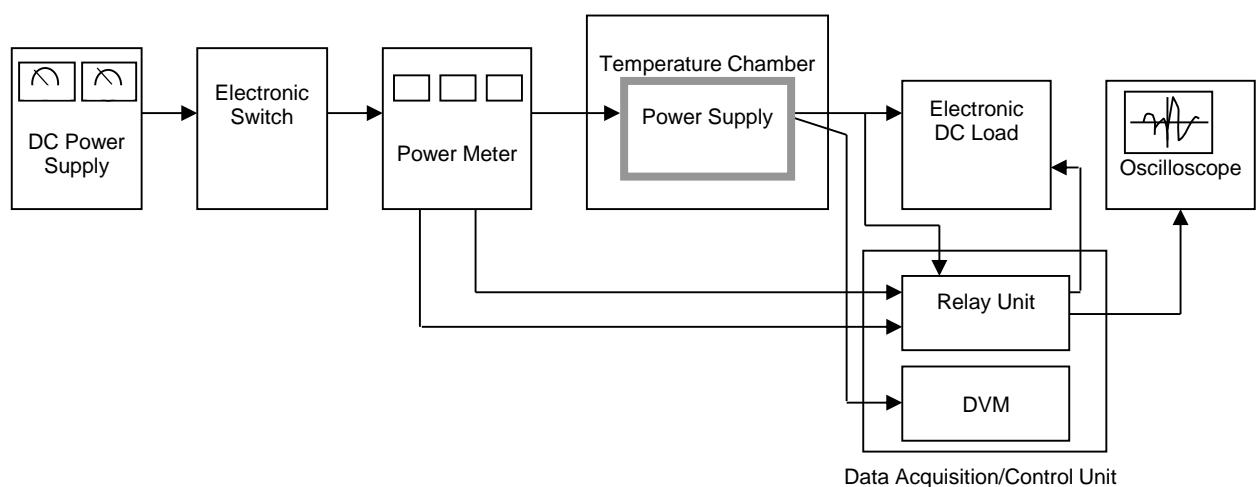


Figure A

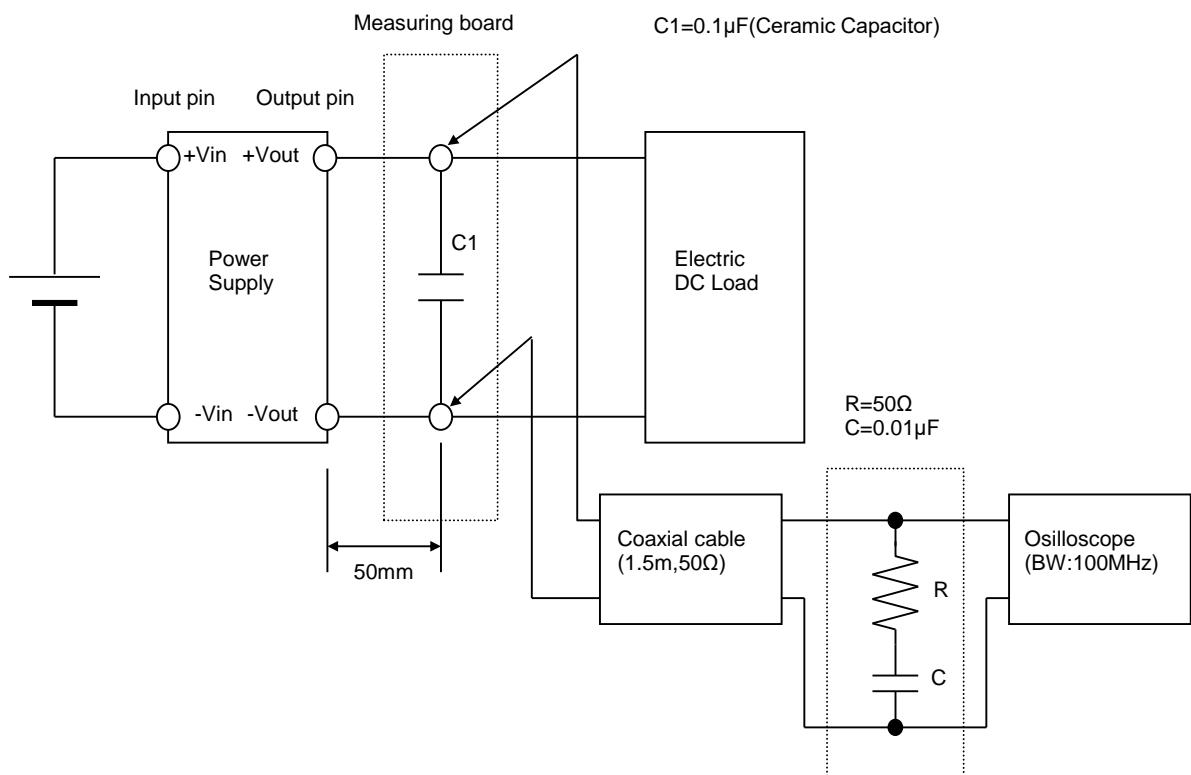


Figure B