

TEST DATA OF MUW32412

Regulated DC Power Supply
February 6, 2025

Approved by : Kenichi Tsukada
Design Manager

Prepared by : Soichiro Kawaguchi
Design Engineer

COSEL CO.,LTD.

CONTENTS

1.Input Current (by Load Current)	1
2.Efficiency (by Load Current)	2
3.Line Regulation	3
4.Cross Regulation	4, 5
5.Ripple-Noise	4, 5
6.Dynamic Load Response	6, 7
7.Rise and Fall Time	8, 9
8.Overcurrent Protection	10
9.Ambient Temperature Drift	11,12
10.Minimum Input Voltage for Regulated Output Voltage	11,12
11.Figure of Testing Circuitry	13

(Final Page 13)

COSCEL

Model	MUW32412
Item	Input Current (by Load Current)
Object	

1.Graph

The graph plots Input Current [A] against Load Ratio [%]. Three series are shown:

- Input Volt. 18V (Solid line with triangles)
- Input Volt. 24V (Dashed line with squares)
- Input Volt. 36V (Dash-dot line with circles)

All curves show a linear increase in current as load ratio increases.

Load Ratio [%]	Input Current [A] @ 18V	Input Current [A] @ 24V	Input Current [A] @ 36V
0	0.011	0.010	0.006
20	0.045	0.036	0.023
40	0.084	0.061	0.045
60	0.121	0.092	0.062
80	0.162	0.122	0.082
100	0.199	0.150	0.103
110	0.222	-	0.113

2.Values

Load Ratio [%]	Input Current [A]		
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]
0	0.011	0.010	0.006
20	0.045	0.036	0.023
40	0.084	0.061	0.045
60	0.121	0.092	0.062
80	0.162	0.122	0.082
100	0.199	0.150	0.103
110	0.222	0.167	0.113
--	-	-	-
--	-	-	-
--	-	-	-
--	-	-	-



Model		MUW32412																																																				
Item		Efficiency (by Load Current)																																																				
Object																																																						
1.Graph		2.Values																																																				
<div><div><div><div>—△—</div><div>Input Volt.</div><div>18V</div></div><div><div>- - □ - -</div><div>Input Volt.</div><div>24V</div></div><div><div>- · · ○ · · -</div><div>Input Volt.</div><div>36V</div></div></div><div><div>Efficiency [%]</div><div><div><div></div><div>90</div></div><div><div></div><div>80</div></div><div><div></div><div>70</div></div><div><div></div><div>60</div></div><div><div></div><div>50</div></div></div><div><div></div><div>0</div></div><div><div></div><div>20</div></div><div><div></div><div>40</div></div><div><div></div><div>60</div></div><div><div></div><div>80</div></div><div><div></div><div>100</div></div><div><div></div><div>120</div></div></div><div><div></div><div>Load Ratio [%]</div></div></div>		<table><tr><th rowspan="2">Load Ratio [%]</th><th colspan="3">Efficiency [%]</th></tr><tr><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0</td><td>-</td><td>-</td><td>-</td></tr><tr><td>20</td><td>70.0</td><td>67.2</td><td>68.6</td></tr><tr><td>40</td><td>79.9</td><td>82.6</td><td>74.4</td></tr><tr><td>60</td><td>82.5</td><td>81.5</td><td>82.5</td></tr><tr><td>80</td><td>83.9</td><td>83.4</td><td>81.5</td></tr><tr><td>100</td><td>84.5</td><td>84.3</td><td>83.0</td></tr><tr><td>110</td><td>84.6</td><td>84.5</td><td>83.5</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table>		Load Ratio [%]	Efficiency [%]			Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	0	-	-	-	20	70.0	67.2	68.6	40	79.9	82.6	74.4	60	82.5	81.5	82.5	80	83.9	83.4	81.5	100	84.5	84.3	83.0	110	84.6	84.5	83.5	--	-	-	-	--	-	-	-	--	-	-	-	--	-	-	-
Load Ratio [%]	Efficiency [%]																																																					
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]																																																			
0	-	-	-																																																			
20	70.0	67.2	68.6																																																			
40	79.9	82.6	74.4																																																			
60	82.5	81.5	82.5																																																			
80	83.9	83.4	81.5																																																			
100	84.5	84.3	83.0																																																			
110	84.6	84.5	83.5																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			
--	-	-	-																																																			

-

2

-

BC-12078

COSEL

<div>COSEL</div>																																			
Model	MUW32412																																		
Item	Line Regulation	Temperature	25°C																																
Object	+12V0.13A	Testing Circuitry	Figure A																																
1.Graph		2.Values																																	
<div><div><div><div></div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div></div><div><div></div><div>---</div><div>△</div><div>---</div></div><div>Load 100%</div></div> <div><div><div>Output Voltage [V]</div><div>12.6</div><div>12.4</div><div>12.2</div><div>12.0</div><div>11.8</div><div>11.6</div></div><div><div>10</div><div>20</div><div>30</div><div>40</div></div><div><div>Input Voltage [V]</div></div></div>		<table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>16</td><td>12.116</td><td>12.043</td></tr><tr><td>18</td><td>12.115</td><td>12.045</td></tr><tr><td>20</td><td>12.114</td><td>12.045</td></tr><tr><td>24</td><td>12.112</td><td>12.046</td></tr><tr><td>30</td><td>12.111</td><td>12.047</td></tr><tr><td>36</td><td>12.111</td><td>12.048</td></tr><tr><td>40</td><td>12.111</td><td>12.048</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> <div>-12V:Rated Load Current</div>		Input Voltage [V]	Output Voltage [V]		Load 50%	Load 100%	16	12.116	12.043	18	12.115	12.045	20	12.114	12.045	24	12.112	12.046	30	12.111	12.047	36	12.111	12.048	40	12.111	12.048	--	-	-	--	-	-
Input Voltage [V]	Output Voltage [V]																																		
	Load 50%	Load 100%																																	
16	12.116	12.043																																	
18	12.115	12.045																																	
20	12.114	12.045																																	
24	12.112	12.046																																	
30	12.111	12.047																																	
36	12.111	12.048																																	
40	12.111	12.048																																	
--	-	-																																	
--	-	-																																	
Object	-12V0.13A																																		
1.Graph		2.Values																																	
<div><div><div><div></div><div>---</div><div>□</div><div>---</div></div><div>Load 50%</div></div><div><div></div><div>---</div><div>△</div><div>---</div></div><div>Load 100%</div></div> <div><div><div>Output Voltage [V]</div><div>-12.6</div><div>-12.4</div><div>-12.2</div><div>-12.0</div><div>-11.8</div><div>-11.6</div></div><div><div>10</div><div>20</div><div>30</div><div>40</div></div><div><div>Input Voltage [V]</div></div></div> <div>Note: Slanted line shows the range of the rated input voltage.</div>		<table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>16</td><td>-12.125</td><td>-12.057</td></tr><tr><td>18</td><td>-12.123</td><td>-12.056</td></tr><tr><td>20</td><td>-12.121</td><td>-12.056</td></tr><tr><td>24</td><td>-12.118</td><td>-12.055</td></tr><tr><td>30</td><td>-12.116</td><td>-12.054</td></tr><tr><td>36</td><td>-12.116</td><td>-12.054</td></tr><tr><td>40</td><td>-12.116</td><td>-12.053</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> <div>+12V:Rated Load Current</div>		Input Voltage [V]	Output Voltage [V]		Load 50%	Load 100%	16	-12.125	-12.057	18	-12.123	-12.056	20	-12.121	-12.056	24	-12.118	-12.055	30	-12.116	-12.054	36	-12.116	-12.054	40	-12.116	-12.053	--	-	-	--	-	-
Input Voltage [V]	Output Voltage [V]																																		
	Load 50%	Load 100%																																	
16	-12.125	-12.057																																	
18	-12.123	-12.056																																	
20	-12.121	-12.056																																	
24	-12.118	-12.055																																	
30	-12.116	-12.054																																	
36	-12.116	-12.054																																	
40	-12.116	-12.053																																	
--	-	-																																	
--	-	-																																	

- 3 -

BC-12078

COSEL

COSEL																																																						
Model	MUW32412	Temperature	25°C																																																			
Item	Load Regulation	Testing Circuitry	Figure A																																																			
Object	+12V0.13A																																																					
1.Graph		2.Values																																																				
<div><div><div><div><div></div></div><div></div></div><div><div></div></div><div><div></div></div></div><div><div>Input Volt.</div><div>18V</div></div><div><div>Input Volt.</div><div>24V</div></div><div><div>Input Volt.</div><div>36V</div></div></div> <p>Note: Slanted line shows the range of the rated load current.</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.000</td><td>12.234</td><td>12.233</td><td>12.233</td></tr><tr><td>0.026</td><td>12.167</td><td>12.165</td><td>12.165</td></tr><tr><td>0.052</td><td>12.129</td><td>12.127</td><td>12.126</td></tr><tr><td>0.078</td><td>12.097</td><td>12.096</td><td>12.095</td></tr><tr><td>0.104</td><td>12.068</td><td>12.068</td><td>12.068</td></tr><tr><td>0.130</td><td>12.040</td><td>12.042</td><td>12.044</td></tr><tr><td>0.143</td><td>12.027</td><td>12.030</td><td>12.032</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr></table> <p>-12V:Rated Load Current</p>		Load Current [A]	Output Voltage [V]			Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	0.000	12.234	12.233	12.233	0.026	12.167	12.165	12.165	0.052	12.129	12.127	12.126	0.078	12.097	12.096	12.095	0.104	12.068	12.068	12.068	0.130	12.040	12.042	12.044	0.143	12.027	12.030	12.032	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Load Current [A]	Output Voltage [V]																																																					
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]																																																			
0.000	12.234	12.233	12.233																																																			
0.026	12.167	12.165	12.165																																																			
0.052	12.129	12.127	12.126																																																			
0.078	12.097	12.096	12.095																																																			
0.104	12.068	12.068	12.068																																																			
0.130	12.040	12.042	12.044																																																			
0.143	12.027	12.030	12.032																																																			
--	--	--	--																																																			
--	--	--	--																																																			
--	--	--	--																																																			
--	--	--	--																																																			
Item	Ripple-Noise	Temperature	25°C																																																			
Object	+12V0.13A	Testing Circuitry	Figure B																																																			
1.Graph																																																						
<div><div><div>Input Voltage</div><div>24V</div></div><div><div>Load</div><div>100%</div></div></div> <p>-12V:Rated Load Current</p>																																																						

-

4

-

BC-12078

COSEL

Model		MUW32412	Temperature25°C																																																				
Item		Load Regulation	Testing CircuitryFigure A																																																				
Object		-12V0.13A																																																					
1.Graph		<div><div><div><div>—△—</div><div>Input Volt.</div><div>18V</div></div><div><div>---□---</div><div>Input Volt.</div><div>24V</div></div><div><div>---○---</div><div>Input Volt.</div><div>36V</div></div></div><div><p>Note: Slanted line shows the range of the rated load current.</p></div></div>	2.Values																																																				
			<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.000</td><td>-12.250</td><td>-12.250</td><td>-12.250</td></tr><tr><td>0.026</td><td>-12.181</td><td>-12.179</td><td>-12.180</td></tr><tr><td>0.052</td><td>-12.144</td><td>-12.140</td><td>-12.139</td></tr><tr><td>0.078</td><td>-12.113</td><td>-12.109</td><td>-12.107</td></tr><tr><td>0.104</td><td>-12.086</td><td>-12.082</td><td>-12.080</td></tr><tr><td>0.130</td><td>-12.059</td><td>-12.057</td><td>-12.056</td></tr><tr><td>0.143</td><td>-12.046</td><td>-12.046</td><td>-12.045</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr><tr><td>--</td><td>--</td><td>--</td><td>--</td></tr></table> <div>+12V:Rated Load Current</div>		Load Current [A]	Output Voltage [V]			Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	0.000	-12.250	-12.250	-12.250	0.026	-12.181	-12.179	-12.180	0.052	-12.144	-12.140	-12.139	0.078	-12.113	-12.109	-12.107	0.104	-12.086	-12.082	-12.080	0.130	-12.059	-12.057	-12.056	0.143	-12.046	-12.046	-12.045	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Load Current [A]	Output Voltage [V]																																																						
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]																																																				
0.000	-12.250	-12.250	-12.250																																																				
0.026	-12.181	-12.179	-12.180																																																				
0.052	-12.144	-12.140	-12.139																																																				
0.078	-12.113	-12.109	-12.107																																																				
0.104	-12.086	-12.082	-12.080																																																				
0.130	-12.059	-12.057	-12.056																																																				
0.143	-12.046	-12.046	-12.045																																																				
--	--	--	--																																																				
--	--	--	--																																																				
--	--	--	--																																																				
--	--	--	--																																																				
Item		Ripple-Noise	Temperature25°C																																																				
Object		-12V0.13A	Testing CircuitryFigure B																																																				
1.Graph		<div><div><div>Input Voltage24V</div><div>Load100%</div></div><div><p>+12V:Rated Load Current</p></div></div>																																																					



Model		MUW32412	Temperature 25°C Testing Circuitry Figure A
Item		Dynamic Load Response	
Object		+12V0.13A	

Input Volt. 24 V

-12V:Rated Load Current

Cycle 1000 ms

Response. t1=t2=50μs. Typ



Load 0%(0A) ←→
Load 100%(0.13A)

200[mV/div]



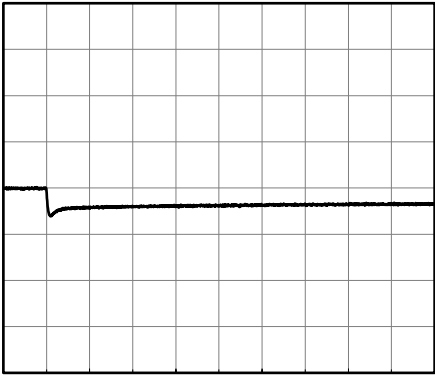
1[ms/div]



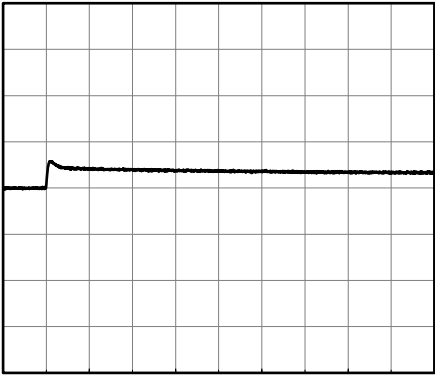
1[ms/div]

Load 50%(0.065A) ←→
Load 100%(0.13A)

200[mV/div]



1[ms/div]



1[ms/div]



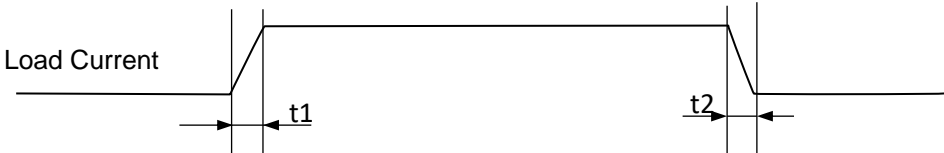
Model		MUW32412	Temperature 25°C Testing Circuitry Figure A
Item		Dynamic Load Response	
Object		-12V0.13A	

Input Volt. 24 V

+12V:Rated Load Current

Cycle 1000 ms

Response. $t_1=t_2=50\mu\text{s}$. Typ



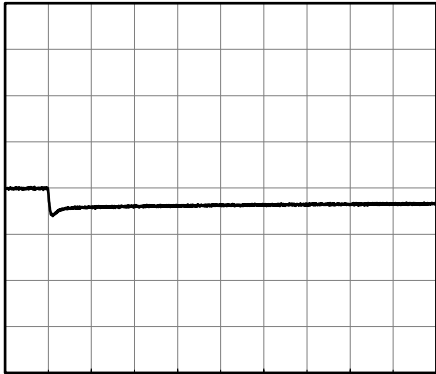
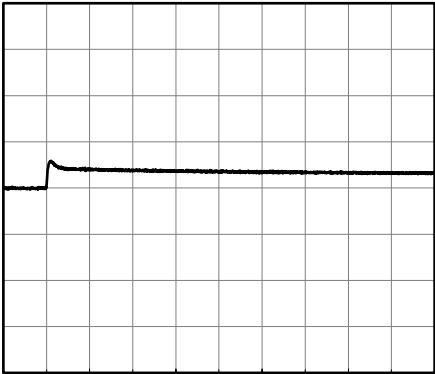
Load 0%(0A) \longleftrightarrow
Load 100%(0.13A)

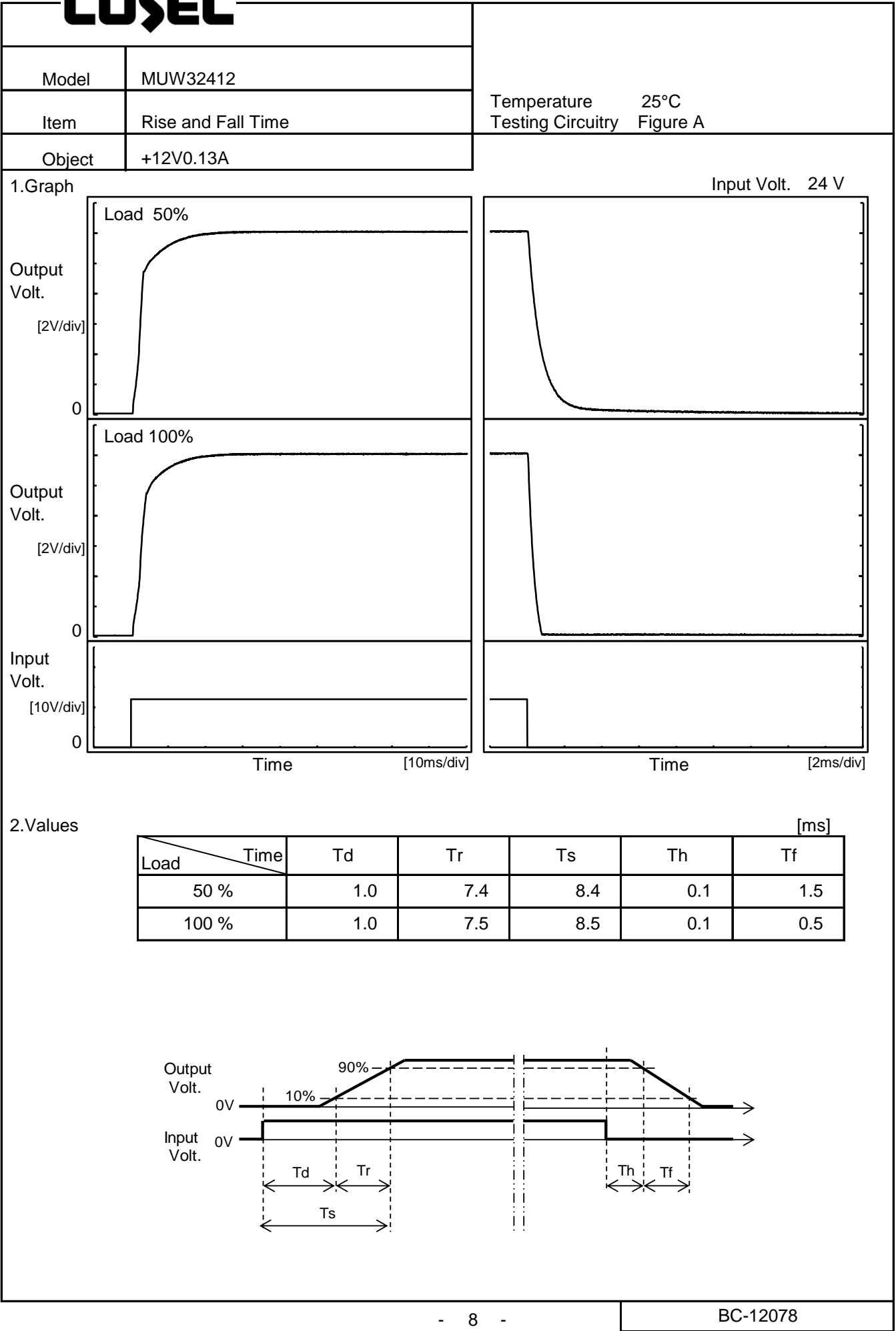
200[mV/div]



Load 50%(0.065A) \longleftrightarrow
Load 100%(0.13A)

200[mV/div]

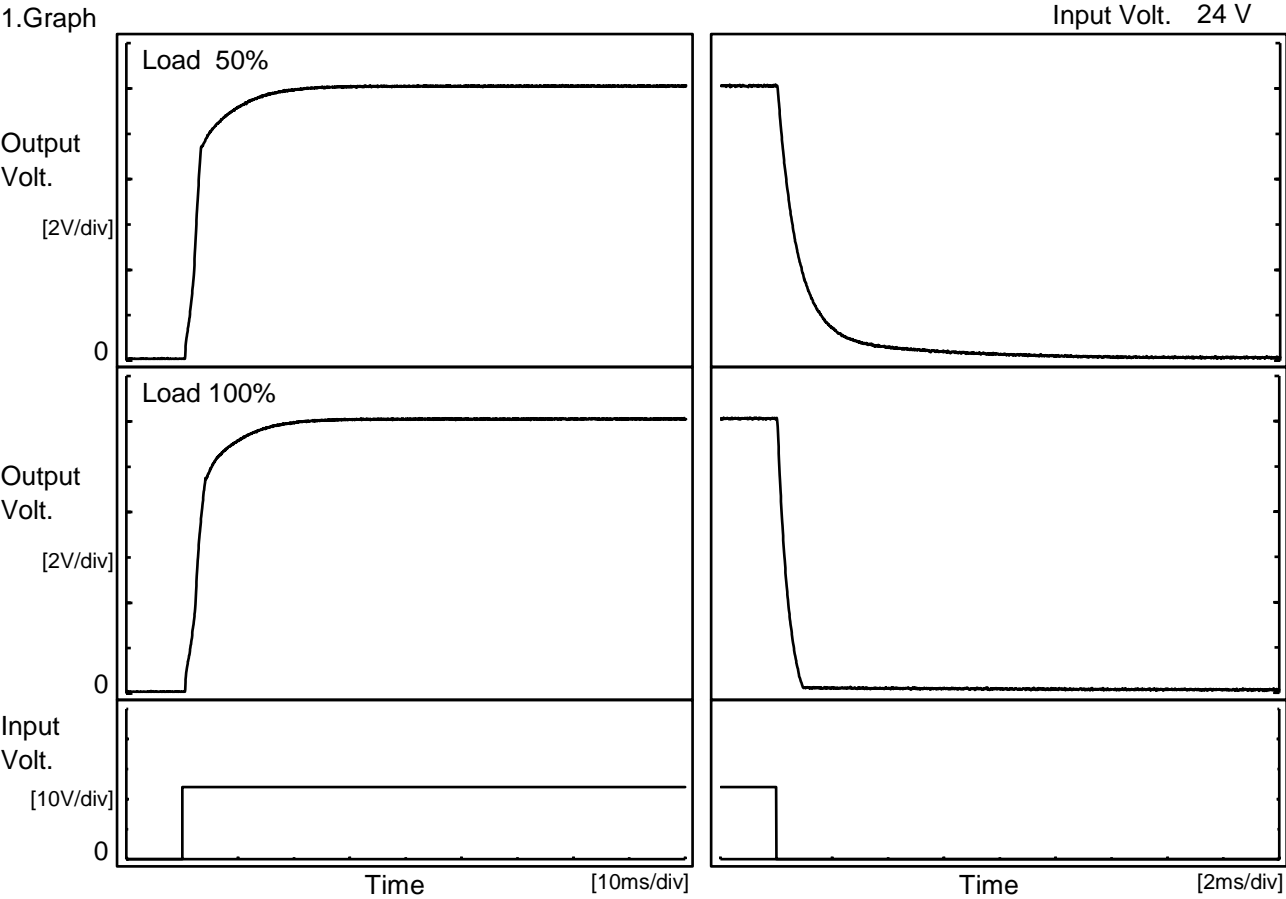






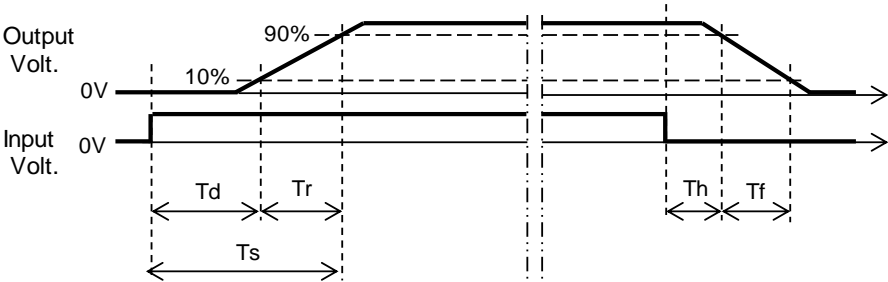
Model	MUW32412	Temperature 25°C Testing Circuitry Figure A
Item	Rise and Fall Time	
Object	-12V0.13A	

1.Graph



2.Values

		[ms]				
Load	Time	Td	Tr	Ts	Th	Tf
50 %		1.0	7.3	8.3	0.1	2.0
100 %		1.0	7.4	8.4	0.1	0.7



COSEL

<div>COSEL</div>																																																										
Model	MUW32412	Temperature25°C Testing CircuitryFigure A																																																								
Item	Overcurrent Protection																																																									
Object	+12V0.13A																																																									
1.Graph <div><div><div></div>Input Volt.18V</div><div><div></div>Input Volt.24V</div><div><div></div>Input Volt.36V</div></div> <div>Output Voltage [V]</div> <div>Load Current [A]</div>		2.Values <table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="3">Load Current [A]</th></tr><tr><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>11.4</td><td>0.24</td><td>0.26</td><td>0.27</td></tr><tr><td>10.8</td><td>0.25</td><td>0.17</td><td>0.18</td></tr><tr><td>9.6</td><td>0.29</td><td>0.31</td><td>0.32</td></tr><tr><td>8.4</td><td>0.33</td><td>0.36</td><td>0.37</td></tr><tr><td>7.2</td><td>0.38</td><td>0.40</td><td>0.42</td></tr><tr><td>6.0</td><td>0.43</td><td>0.45</td><td>0.47</td></tr><tr><td>4.8</td><td>0.49</td><td>0.51</td><td>0.52</td></tr><tr><td>3.6</td><td>0.54</td><td>0.56</td><td>0.57</td></tr><tr><td>2.4</td><td>0.56</td><td>0.58</td><td>0.59</td></tr><tr><td>1.2</td><td>0.64</td><td>0.64</td><td>0.63</td></tr><tr><td>0.0</td><td>0.76</td><td>0.76</td><td>0.74</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table> -12V:Rated Load Current		Output Voltage [V]	Load Current [A]			Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	11.4	0.24	0.26	0.27	10.8	0.25	0.17	0.18	9.6	0.29	0.31	0.32	8.4	0.33	0.36	0.37	7.2	0.38	0.40	0.42	6.0	0.43	0.45	0.47	4.8	0.49	0.51	0.52	3.6	0.54	0.56	0.57	2.4	0.56	0.58	0.59	1.2	0.64	0.64	0.63	0.0	0.76	0.76	0.74	--	-	-	-
Output Voltage [V]	Load Current [A]																																																									
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]																																																							
11.4	0.24	0.26	0.27																																																							
10.8	0.25	0.17	0.18																																																							
9.6	0.29	0.31	0.32																																																							
8.4	0.33	0.36	0.37																																																							
7.2	0.38	0.40	0.42																																																							
6.0	0.43	0.45	0.47																																																							
4.8	0.49	0.51	0.52																																																							
3.6	0.54	0.56	0.57																																																							
2.4	0.56	0.58	0.59																																																							
1.2	0.64	0.64	0.63																																																							
0.0	0.76	0.76	0.74																																																							
--	-	-	-																																																							
Object	-12V0.13A																																																									
1.Graph <div><div><div></div>Input Volt.18V</div><div><div></div>Input Volt.24V</div><div><div></div>Input Volt.36V</div></div> <div>Output Voltage [V]</div> <div>Load Current [A]</div> <div>Note: Slanted line shows the range of the rated load current.</div>		2.Values <table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="3">Load Current [A]</th></tr><tr><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>-11.4</td><td>0.26</td><td>0.28</td><td>0.29</td></tr><tr><td>-10.8</td><td>0.28</td><td>0.30</td><td>0.31</td></tr><tr><td>-9.6</td><td>0.31</td><td>0.34</td><td>0.35</td></tr><tr><td>-8.4</td><td>0.35</td><td>0.37</td><td>0.39</td></tr><tr><td>-7.2</td><td>0.40</td><td>0.42</td><td>0.43</td></tr><tr><td>-6.0</td><td>0.45</td><td>0.47</td><td>0.48</td></tr><tr><td>-4.8</td><td>0.49</td><td>0.52</td><td>0.53</td></tr><tr><td>-3.6</td><td>0.55</td><td>0.57</td><td>0.58</td></tr><tr><td>-2.4</td><td>0.57</td><td>0.59</td><td>0.59</td></tr><tr><td>-1.2</td><td>0.64</td><td>0.65</td><td>0.64</td></tr><tr><td>0.0</td><td>0.76</td><td>0.76</td><td>0.74</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table> +12V:Rated Load Current		Output Voltage [V]	Load Current [A]			Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]	-11.4	0.26	0.28	0.29	-10.8	0.28	0.30	0.31	-9.6	0.31	0.34	0.35	-8.4	0.35	0.37	0.39	-7.2	0.40	0.42	0.43	-6.0	0.45	0.47	0.48	-4.8	0.49	0.52	0.53	-3.6	0.55	0.57	0.58	-2.4	0.57	0.59	0.59	-1.2	0.64	0.65	0.64	0.0	0.76	0.76	0.74	--	-	-	-
Output Voltage [V]	Load Current [A]																																																									
	Input Volt. 18[V]	Input Volt. 24[V]	Input Volt. 36[V]																																																							
-11.4	0.26	0.28	0.29																																																							
-10.8	0.28	0.30	0.31																																																							
-9.6	0.31	0.34	0.35																																																							
-8.4	0.35	0.37	0.39																																																							
-7.2	0.40	0.42	0.43																																																							
-6.0	0.45	0.47	0.48																																																							
-4.8	0.49	0.52	0.53																																																							
-3.6	0.55	0.57	0.58																																																							
-2.4	0.57	0.59	0.59																																																							
-1.2	0.64	0.65	0.64																																																							
0.0	0.76	0.76	0.74																																																							
--	-	-	-																																																							

- 10 -

BC-12078

COSEL

<div>COSEL</div>		Testing Circuitry Figure A																			
Model	MUW32412																				
Item	Ambient Temperature Drift																				
Object	+12V0.13A																				
1.Values <div>Load 100%</div> <table><tr><th rowspan="2">Ambient Temperature[°C]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 18V</th><th>Input Volt. 24V</th><th>Input Volt. 36V</th></tr><tr><td>-40</td><td>11.941</td><td>11.945</td><td>11.947</td></tr><tr><td>25</td><td>12.039</td><td>12.041</td><td>12.043</td></tr><tr><td>85</td><td>12.077</td><td>12.079</td><td>12.081</td></tr></table>			Ambient Temperature[°C]	Output Voltage [V]			Input Volt. 18V	Input Volt. 24V	Input Volt. 36V	-40	11.941	11.945	11.947	25	12.039	12.041	12.043	85	12.077	12.079	12.081
Ambient Temperature[°C]	Output Voltage [V]																				
	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V																		
-40	11.941	11.945	11.947																		
25	12.039	12.041	12.043																		
85	12.077	12.079	12.081																		
Item Minimum Input Voltage for Regulated Output Voltage		Testing Circuitry Figure A																			
Object	+12V0.13A																				
1.Values <table><tr><th rowspan="2">Ambient Temperature[°C]</th><th colspan="2">Input Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>-40</td><td>14.0</td><td>13.9</td></tr><tr><td>25</td><td>14.0</td><td>14.0</td></tr><tr><td>85</td><td>14.1</td><td>14.0</td></tr></table>			Ambient Temperature[°C]	Input Voltage [V]		Load 50%	Load 100%	-40	14.0	13.9	25	14.0	14.0	85	14.1	14.0					
Ambient Temperature[°C]	Input Voltage [V]																				
	Load 50%	Load 100%																			
-40	14.0	13.9																			
25	14.0	14.0																			
85	14.1	14.0																			
		BC-12078																			

COSEL

		Testing Circuitry Figure A
Model	MUW32412	
Item	Ambient Temperature Drift	
Object	-12V0.13A	

1.Values

Load 100%

Ambient Temperature[°C]	Output Voltage [V]		
	Input Volt. 18V	Input Volt. 24V	Input Volt. 36V
-40	-11.957	-11.957	-11.957
25	-12.057	-12.056	-12.055
85	-12.097	-12.095	-12.094

Item	Minimum Input Voltage for Regulated Output Voltage	Testing Circuitry Figure A
Object	-12V0.13A	

1.Values

Ambient Temperature[°C]	Input Voltage [V]	
	Load 50%	Load 100%
-40	14.0	14.0
25	14.0	14.0
85	14.1	14.0

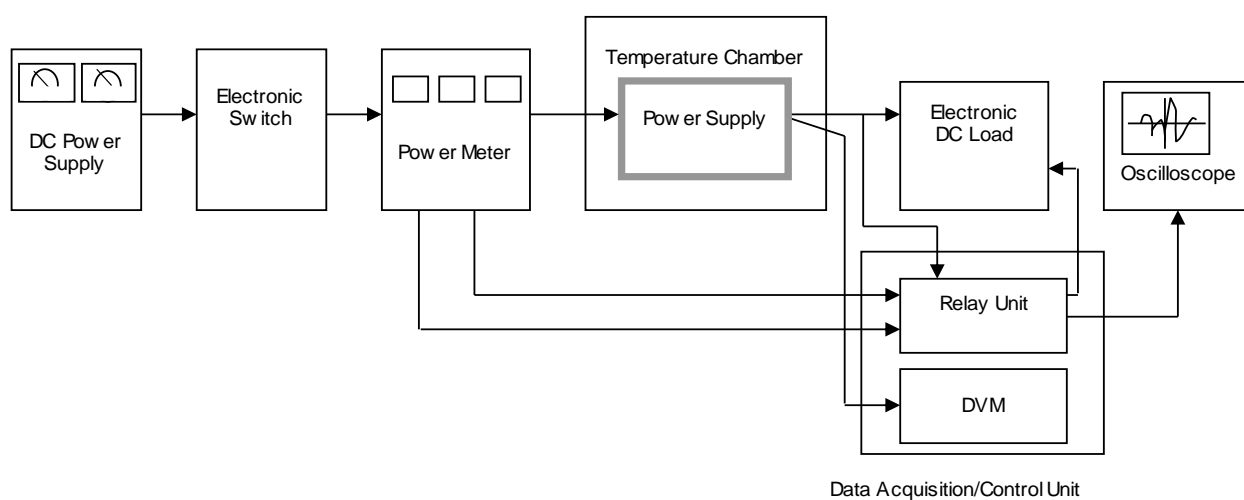


Figure A

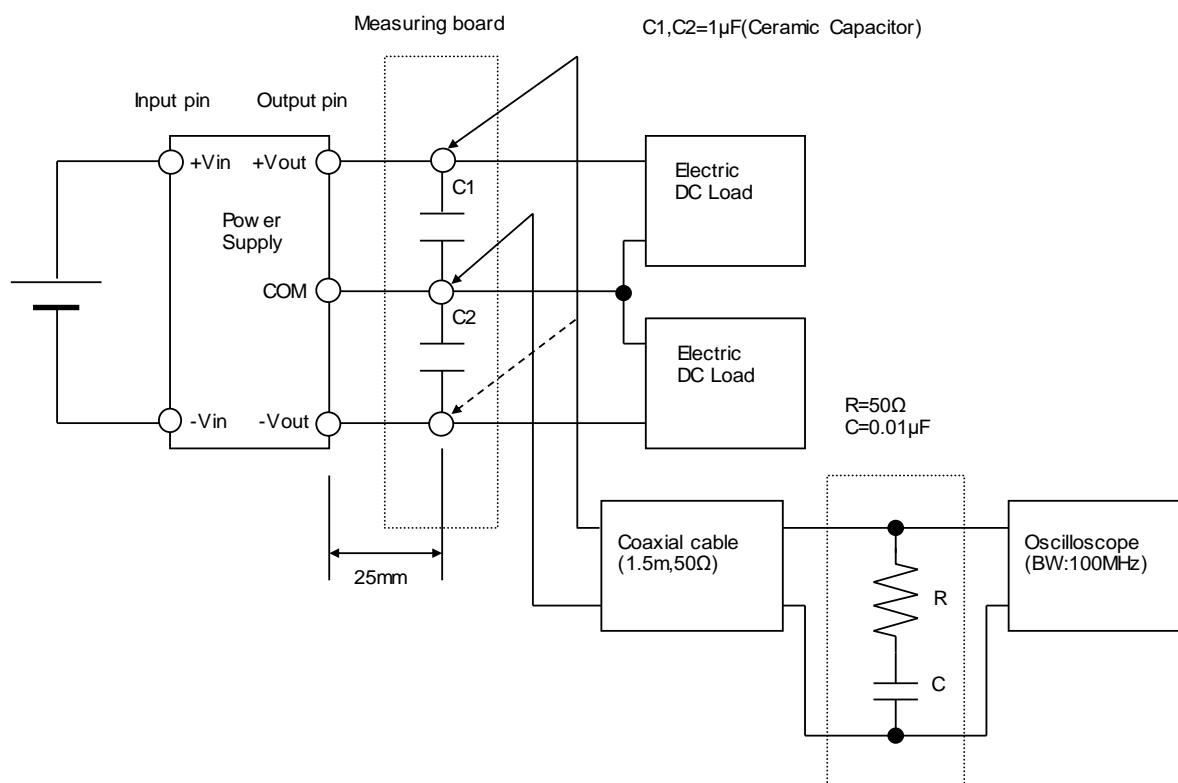


Figure B