

# TEST DATA OF MUW102415

Regulated DC Power Supply  
May.7. 2025

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Design Manager

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Design Engineer

**COSEL CO.,LTD.**



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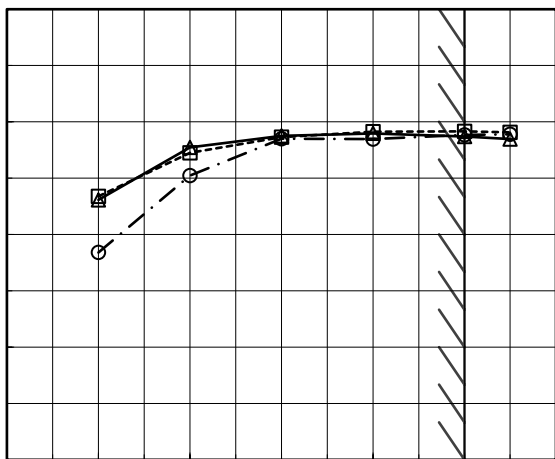
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|---|---------------------------------|---|-------------------|----------------|-------------------|--|--|-------------------|-------------------|-------------------|---|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| Model   | MUW102415                       |   |                   |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| Item  | Input Current (by Load Current) | Temperature   | 25°C              |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
|   |                                 | Testing Circuitry   | Figure A          |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| Object  |                                 |   |                   |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 1.Graph   |                                 | 2.Values  |                   |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| <div><div><div>—△—</div><div>---□---</div><div>---○---</div></div><div><div>Input Volt.</div><div>Input Volt.</div><div>Input Volt.</div></div><div><div>18V</div><div>24V</div><div>36V</div></div></div> <p>Input Current [A]</p> <p>Load Ratio [%]</p> |                                 | <table><tr><th rowspan="2">Load Ratio [%]</th><th colspan="3">Input 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>0</td><td>0.015</td><td>0.012</td><td>0.007</td></tr><tr><td>20</td><td>0.141</td><td>0.105</td><td>0.075</td></tr><tr><td>40</td><td>0.267</td><td>0.201</td><td>0.137</td></tr><tr><td>60</td><td>0.396</td><td>0.297</td><td>0.198</td></tr><tr><td>80</td><td>0.524</td><td>0.393</td><td>0.263</td></tr><tr><td>100</td><td>0.658</td><td>0.492</td><td>0.328</td></tr><tr><td>110</td><td>0.726</td><td>0.542</td><td>0.361</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 [%] | Input Current [A] |  |  | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0 | 0.015 | 0.012 | 0.007 | 20 | 0.141 | 0.105 | 0.075 | 40 | 0.267 | 0.201 | 0.137 | 60 | 0.396 | 0.297 | 0.198 | 80 | 0.524 | 0.393 | 0.263 | 100 | 0.658 | 0.492 | 0.328 | 110 | 0.726 | 0.542 | 0.361 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Load Ratio [%]  | Input Current [A]               |   |                   |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
|   | Input Volt. 18[V]               | Input Volt. 24[V]   | Input Volt. 36[V] |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 0   | 0.015                           | 0.012   | 0.007             |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 20  | 0.141                           | 0.105   | 0.075             |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 40  | 0.267                           | 0.201   | 0.137             |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 60  | 0.396                           | 0.297   | 0.198             |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 80  | 0.524                           | 0.393   | 0.263             |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 100   | 0.658                           | 0.492   | 0.328             |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 110   | 0.726                           | 0.542   | 0.361             |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                               | -   | -                 |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                               | -   | -                 |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                               | -   | -                 |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                               | -   | -                 |                |                   |  |  |                   |                   |                   |   |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |    |       |       |       |     |       |       |       |     |       |       |       |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |

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|---|------------------------------|--|-------------------|----------------|----------------|--|--|-------------------|-------------------|-------------------|---|---|---|---|----|------|------|------|----|------|------|------|----|------|------|------|----|------|------|------|-----|------|------|------|-----|------|------|------|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| Model   | MUW102415                    |  |                   |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| Item  | Efficiency (by Load Current) | Temperature  | 25°C              |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
|   |                              | Testing Circuitry  | Figure A          |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| Object  |                              |  |                   |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 1.Graph   |                              | 2.Values   |                   |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| <div><div><div><div><div></div><div>△</div></div><div>—</div><div>Input Volt. 18V</div></div><div><div><div></div><div>□</div></div><div>- -</div><div>Input Volt. 24V</div></div><div><div><div></div><div>○</div></div><div>- · - ·</div><div>Input Volt. 36V</div></div></div><div><div><div>Efficiency [%]</div><div>100</div><div>90</div><div>80</div><div>70</div><div>60</div></div><div><div><div>0</div><div>20</div><div>40</div><div>60</div><div>80</div><div>100</div><div>120</div></div><div><div>Load Ratio [%]</div></div></div><div></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>83.1</td><td>83.4</td><td>78.4</td></tr><tr><td>40</td><td>87.7</td><td>87.3</td><td>85.2</td></tr><tr><td>60</td><td>88.8</td><td>88.6</td><td>88.5</td></tr><tr><td>80</td><td>89.0</td><td>89.1</td><td>88.5</td></tr><tr><td>100</td><td>88.7</td><td>89.2</td><td>88.9</td></tr><tr><td>110</td><td>88.5</td><td>89.1</td><td>88.9</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 | 83.1 | 83.4 | 78.4 | 40 | 87.7 | 87.3 | 85.2 | 60 | 88.8 | 88.6 | 88.5 | 80 | 89.0 | 89.1 | 88.5 | 100 | 88.7 | 89.2 | 88.9 | 110 | 88.5 | 89.1 | 88.9 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Load Ratio [%]  | Efficiency [%]               |  |                   |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
|   | Input Volt. 18[V]            | Input Volt. 24[V]  | Input Volt. 36[V] |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 0   | -                            | -  | -                 |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 20  | 83.1                         | 83.4   | 78.4              |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 40  | 87.7                         | 87.3   | 85.2              |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 60  | 88.8                         | 88.6   | 88.5              |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 80  | 89.0                         | 89.1   | 88.5              |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 100   | 88.7                         | 89.2   | 88.9              |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| 110   | 88.5                         | 89.1   | 88.9              |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                            | -  | -                 |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                            | -  | -                 |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                            | -  | -                 |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |
| --  | -                            | -  | -                 |                |                |  |  |                   |                   |                   |   |   |   |   |    |      |      |      |    |      |      |      |    |      |      |      |    |      |      |      |     |      |      |      |     |      |      |      |    |   |   |   |    |   |   |   |    |   |   |   |    |   |   |   |

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| <div>COSEL</div>   |                 |                   |          |
| Model  | MUW102415       |                   |          |
| Item   | Line Regulation | Temperature       | 25°C     |
| Object   | +15V0.35A       | Testing Circuitry | Figure A |
| 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><div><div></div><div></div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> 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**COSEL**

| COSEL  |                    |  |                   |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--|--------------------|--|-------------------|------------------|--------------------|--|--|-------------------|-------------------|-------------------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Model  | MUW102415          | Temperature  | 25°C              |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Item   | Load Regulation    | Testing Circuitry  | Figure A          |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Object   | +15V0.35A          |  |                   |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 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><p>Output Voltage [V]</p><p>Load Current [A]</p><p>Note: Slanted line shows the range of the rated load current.</p></div></div> |                    | <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>15.282</td><td>15.284</td><td>15.286</td></tr><tr><td>0.070</td><td>15.165</td><td>15.163</td><td>15.164</td></tr><tr><td>0.140</td><td>15.118</td><td>15.114</td><td>15.114</td></tr><tr><td>0.210</td><td>15.080</td><td>15.078</td><td>15.077</td></tr><tr><td>0.280</td><td>15.047</td><td>15.047</td><td>15.048</td></tr><tr><td>0.350</td><td>15.016</td><td>15.019</td><td>15.022</td></tr><tr><td>0.385</td><td>15.001</td><td>15.006</td><td>15.009</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>-15V : Rated Load Current</p> |                   | Load Current [A] | Output Voltage [V] |  |  | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.000 | 15.282 | 15.284 | 15.286 | 0.070 | 15.165 | 15.163 | 15.164 | 0.140 | 15.118 | 15.114 | 15.114 | 0.210 | 15.080 | 15.078 | 15.077 | 0.280 | 15.047 | 15.047 | 15.048 | 0.350 | 15.016 | 15.019 | 15.022 | 0.385 | 15.001 | 15.006 | 15.009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Load Current [A]   | Output Voltage [V] |  |                   |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|  | Input Volt. 18[V]  | Input Volt. 24[V]  | Input Volt. 36[V] |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0.000  | 15.282             | 15.284   | 15.286            |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0.070  | 15.165             | 15.163   | 15.164            |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0.140  | 15.118             | 15.114   | 15.114            |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0.210  | 15.080             | 15.078   | 15.077            |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0.280  | 15.047             | 15.047   | 15.048            |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0.350  | 15.016             | 15.019   | 15.022            |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0.385  | 15.001             | 15.006   | 15.009            |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| --   | --                 | --   | --                |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| --   | --                 | --   | --                |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| --   | --                 | --   | --                |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| --   | --                 | --   | --                |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Item   | Ripple-Noise       | Temperature  | 25°C              |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Object   | +15V0.35A          | 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>20[mV/div]</p><p>2[μs/div]</p></div></div> <p>-15V : Rated Load Current</p>   |                    |  |                   |                  |                    |  |  |                   |                   |                   |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |       |        |        |        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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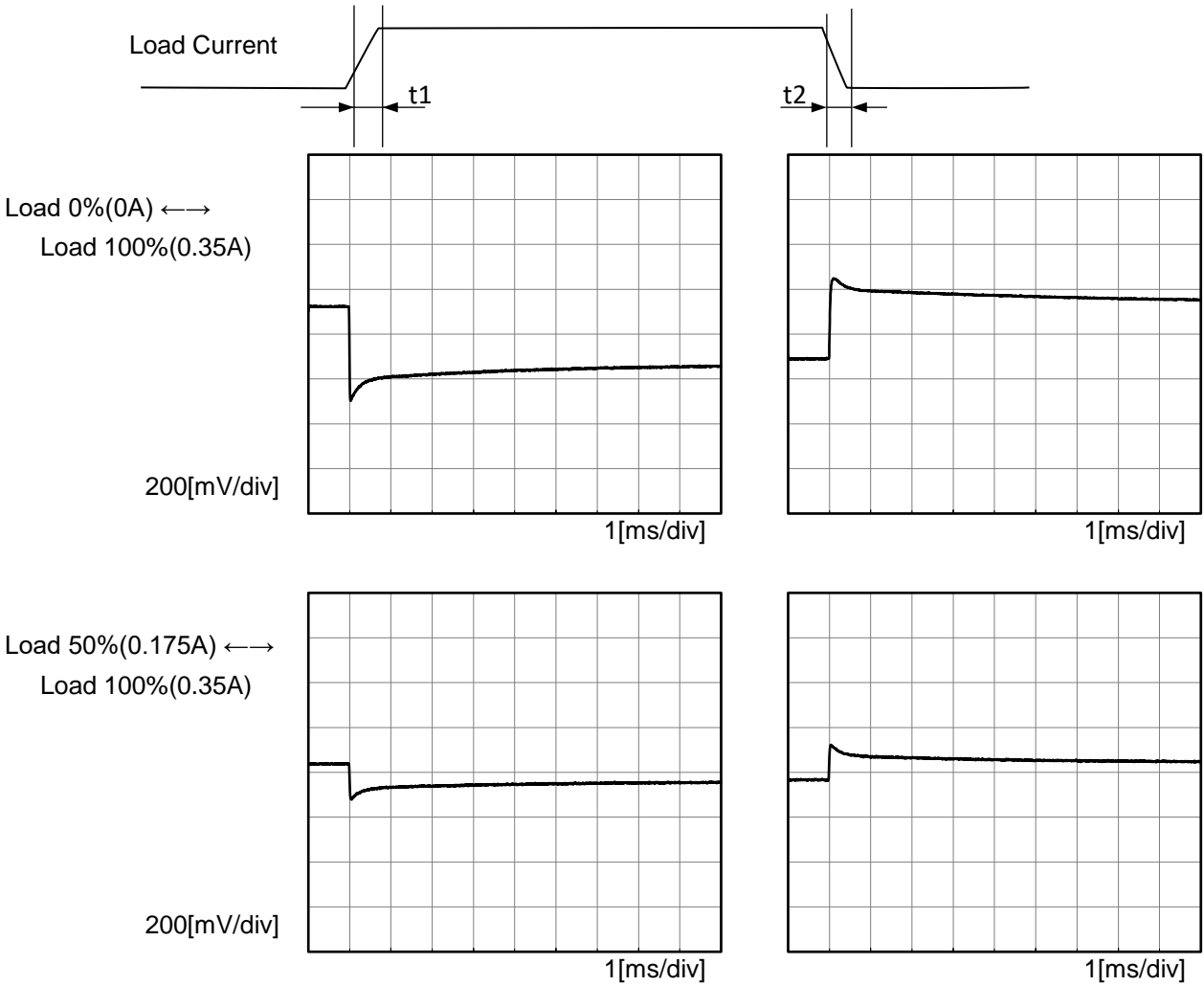
# COSEL

| COSEL  |                    |                   |                    |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
|--|--------------------|-------------------|--------------------|--|--|-------------------|-------------------|-------------------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|
| Model  | MUW102415          | Temperature       | 25°C               |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Item   | Load Regulation    | Testing Circuitry | Figure A           |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Object   | -15V0.35A          |                   |                    |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 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><p>Note: Slanted line shows the range of the rated load current.</p></div></div> <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>-15.329</td><td>-15.328</td><td>-15.326</td></tr><tr><td>0.070</td><td>-15.200</td><td>-15.197</td><td>-15.196</td></tr><tr><td>0.140</td><td>-15.154</td><td>-15.148</td><td>-15.146</td></tr><tr><td>0.210</td><td>-15.118</td><td>-15.113</td><td>-15.108</td></tr><tr><td>0.280</td><td>-15.086</td><td>-15.082</td><td>-15.079</td></tr><tr><td>0.350</td><td>-15.056</td><td>-15.054</td><td>-15.052</td></tr><tr><td>0.385</td><td>-15.042</td><td>-15.041</td><td>-15.040</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>+15V : Rated Load Current</div> |                    | Load Current [A]  | Output Voltage [V] |  |  | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.000 | -15.329 | -15.328 | -15.326 | 0.070 | -15.200 | -15.197 | -15.196 | 0.140 | -15.154 | -15.148 | -15.146 | 0.210 | -15.118 | -15.113 | -15.108 | 0.280 | -15.086 | -15.082 | -15.079 | 0.350 | -15.056 | -15.054 | -15.052 | 0.385 | -15.042 | -15.041 | -15.040 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |  |  |
| Load Current [A]   | Output Voltage [V] |                   |                    |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
|  | Input Volt. 18[V]  | Input Volt. 24[V] | Input Volt. 36[V]  |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 0.000  | -15.329            | -15.328           | -15.326            |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 0.070  | -15.200            | -15.197           | -15.196            |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 0.140  | -15.154            | -15.148           | -15.146            |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 0.210  | -15.118            | -15.113           | -15.108            |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 0.280  | -15.086            | -15.082           | -15.079            |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 0.350  | -15.056            | -15.054           | -15.052            |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| 0.385  | -15.042            | -15.041           | -15.040            |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| --   | --                 | --                | --                 |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| --   | --                 | --                | --                 |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| --   | --                 | --                | --                 |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| --   | --                 | --                | --                 |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Item   | Ripple-Noise       | Temperature       | 25°C               |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| Object   | -15V0.35A          | 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>20[mV/div]</p><p>2[μs/div]</p></div></div> <div>+15V : Rated Load Current</div>   |                    |                   |                    |  |  |                   |                   |                   |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |       |         |         |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |



|        |  |                       |  |
|--------|--|-----------------------|--|
| Model  |  | MUW102415             | Temperature     25°C<br>Testing Circuitry   Figure A |
| Item   |  | Dynamic Load Response |  |
| Object |  | +15V0.35A             |  |

Input Volt.     24 V  
-15V: Rated Load Current  
Cycle     100 ms  
Response. t1=t2=50μs. Typ

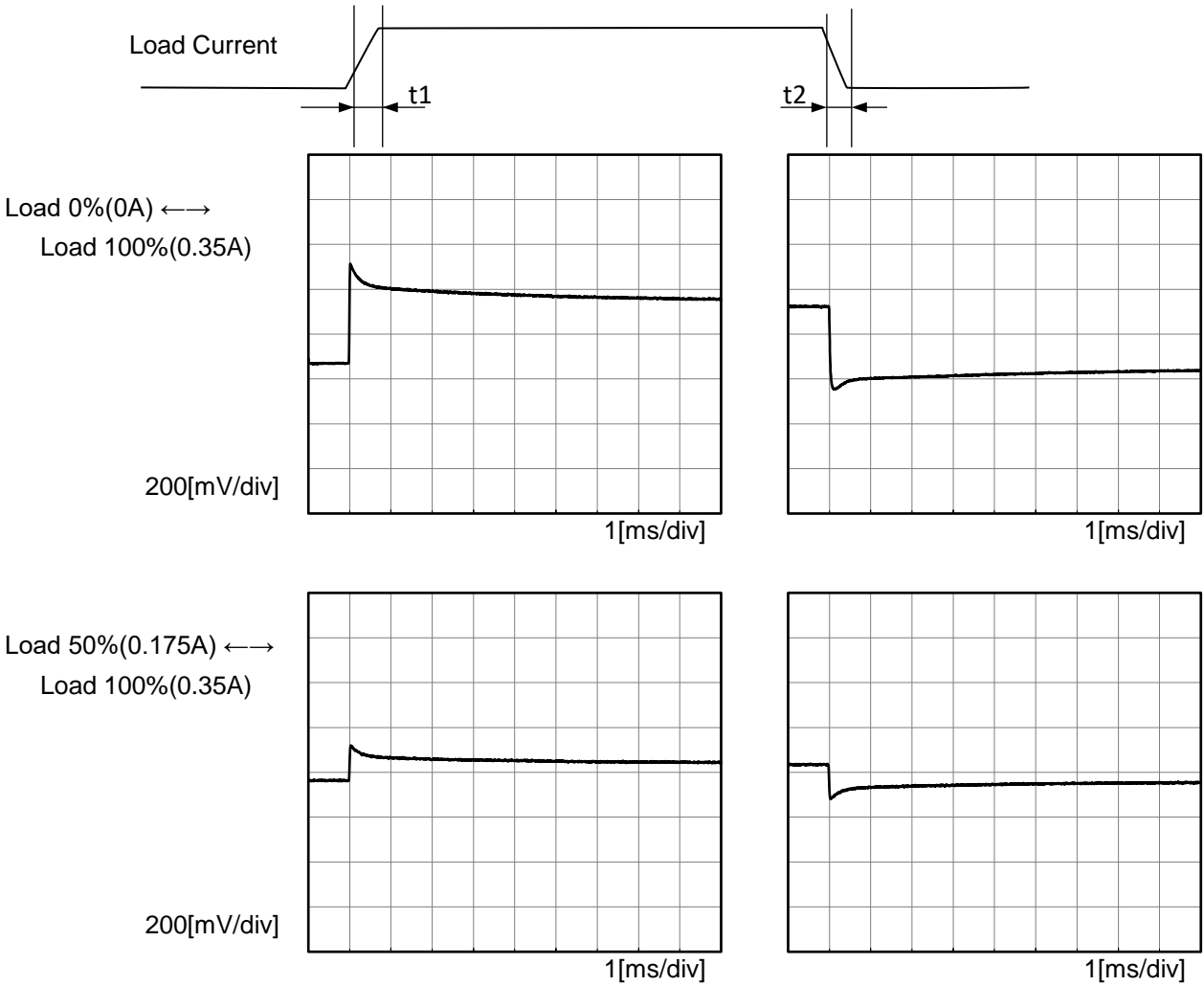






|        |  |                       |  |
|--------|--|-----------------------|--|
| Model  |  | MUW102415             | Temperature 25°C<br>Testing Circuitry Figure A |
| Item   |  | Dynamic Load Response |  |
| Object |  | -15V0.35A             |  |

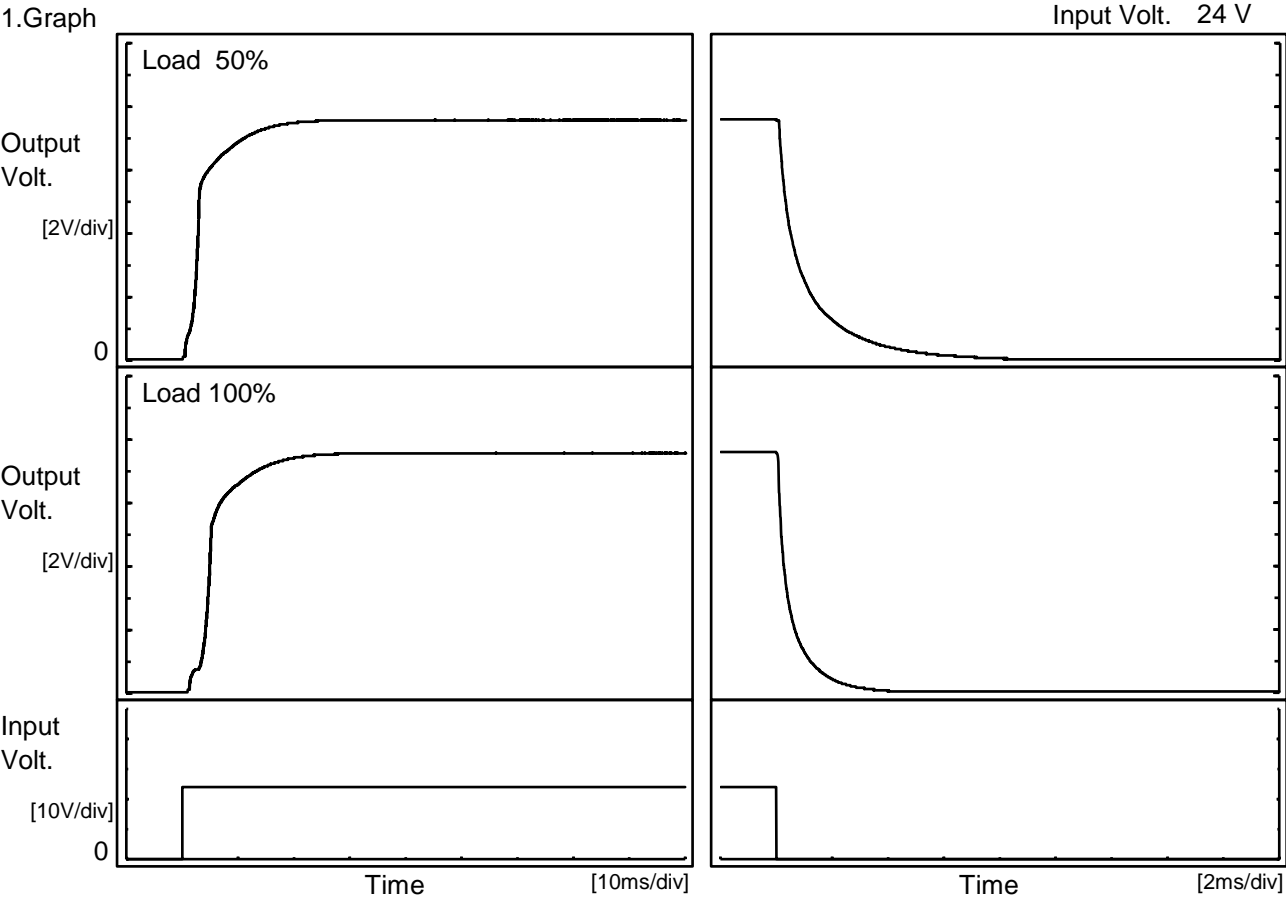
Input Volt. 24 V  
+15V : Rated Load Current  
Cycle 100 ms  
Response. t1=t2=50μs. Typ





|        |                    |  |  |
|--------|--------------------|--|--|
| Model  | MUW102415          | Temperature 25°C<br>Testing Circuitry Figure A |  |
| Item   | Rise and Fall Time |  |  |
| Object | +15V0.35A          |  |  |

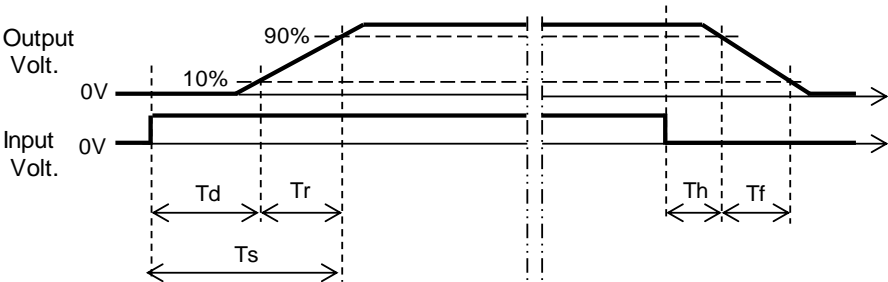
1.Graph



-15V:Load Current is same as +15V

2.Values

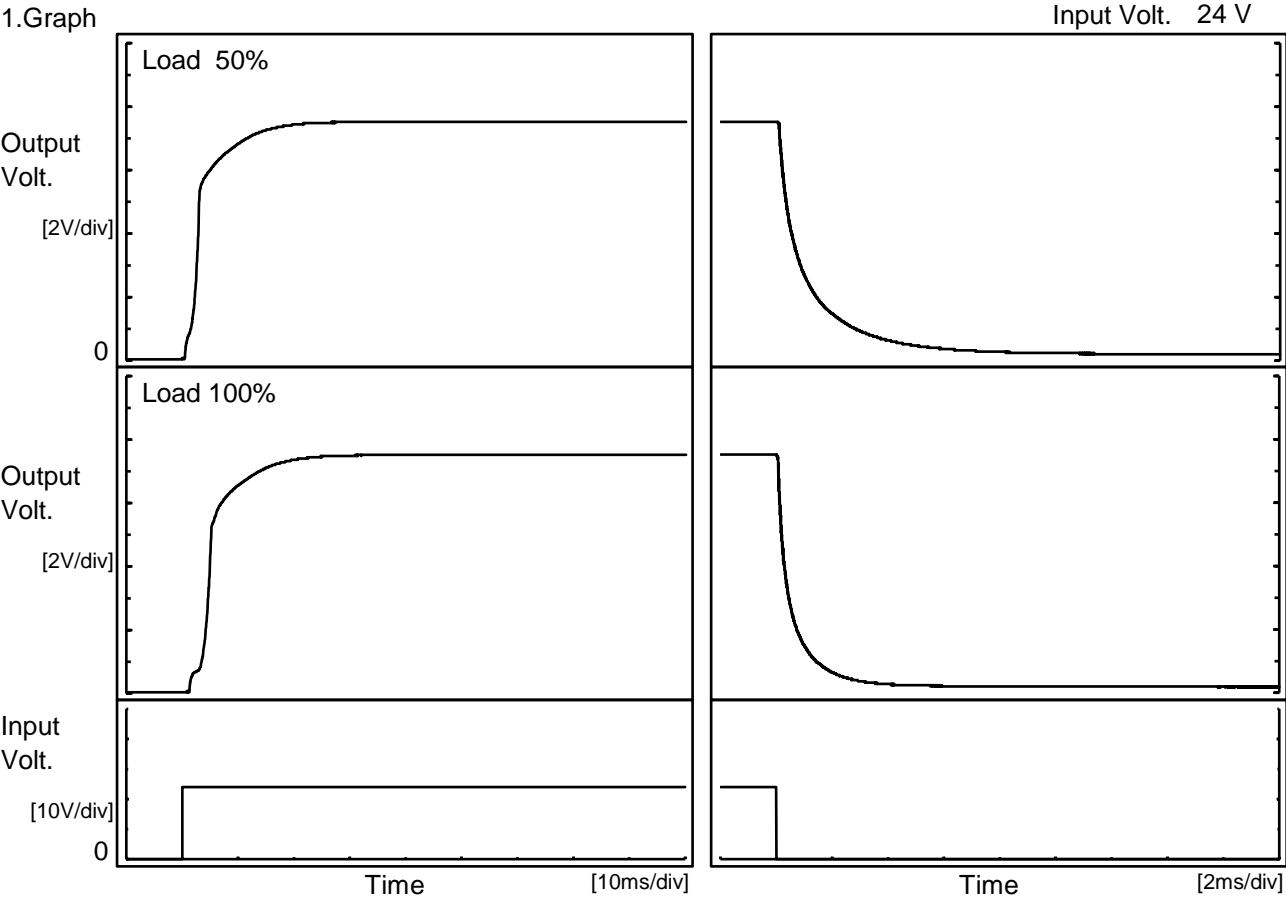
|       |      | [ms] |     |      |     |     |
|-------|------|------|-----|------|-----|-----|
| Load  | Time | Td   | Tr  | Ts   | Th  | Tf  |
| 50 %  |      | 1.0  | 8.2 | 9.2  | 0.1 | 2.7 |
| 100 % |      | 3.0  | 8.3 | 11.3 | 0.1 | 1.3 |





|        |                    |  |  |
|--------|--------------------|--|--|
| Model  | MUW102415          | Temperature 25°C<br>Testing Circuitry Figure A |  |
| Item   | Rise and Fall Time |  |  |
| Object | -15V0.35A          |  |  |

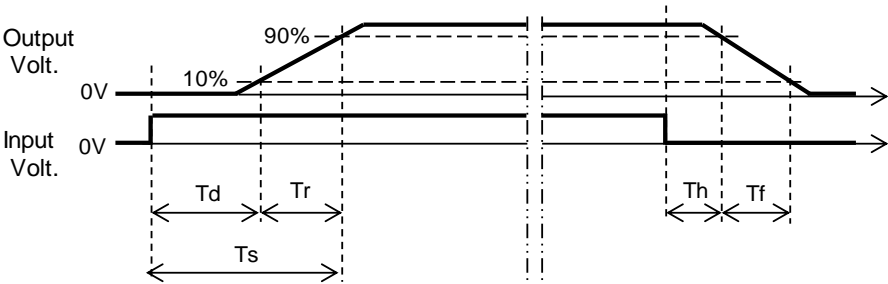
1.Graph



+15V:Load Current is same as -15V

2.Values

|       |      | [ms] |     |      |     |     |
|-------|------|------|-----|------|-----|-----|
| Load  | Time | Td   | Tr  | Ts   | Th  | Tf  |
| 50 %  |      | 1.1  | 8.5 | 9.6  | 0.1 | 3.3 |
| 100 % |      | 3.1  | 8.7 | 11.8 | 0.1 | 1.7 |



**COSEL**

| <div>COSEL</div>   |                        |  |                   |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
|--|------------------------|--|-------------------|--------------------|------------------|--|--|-------------------|-------------------|-------------------|--------|------|------|------|--------|------|------|------|--------|------|------|------|--------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|-------|------|------|------|------|------|------|------|----|---|---|---|
| Model  | MUW102415              | Temperature  | 25°C              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| Item   | Overcurrent Protection | Testing Circuitry  | Figure A          |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| Object   | +15V0.35A              |  |                   |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 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>14.25</td><td>0.66</td><td>0.75</td><td>0.83</td></tr><tr><td>13.50</td><td>0.70</td><td>0.78</td><td>0.87</td></tr><tr><td>12.00</td><td>0.77</td><td>0.87</td><td>0.96</td></tr><tr><td>10.50</td><td>0.86</td><td>0.96</td><td>1.06</td></tr><tr><td>9.00</td><td>0.97</td><td>1.06</td><td>1.15</td></tr><tr><td>7.50</td><td>1.02</td><td>1.10</td><td>1.14</td></tr><tr><td>6.00</td><td>1.05</td><td>1.10</td><td>1.12</td></tr><tr><td>4.50</td><td>1.09</td><td>1.12</td><td>1.12</td></tr><tr><td>3.00</td><td>1.15</td><td>1.16</td><td>1.14</td></tr><tr><td>1.50</td><td>1.26</td><td>1.26</td><td>1.20</td></tr><tr><td>0.00</td><td>1.45</td><td>1.45</td><td>1.43</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table> <div>-15V : Rated Load Current</div>           |                   | Output Voltage [V] | Load Current [A] |  |  | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 14.25  | 0.66 | 0.75 | 0.83 | 13.50  | 0.70 | 0.78 | 0.87 | 12.00  | 0.77 | 0.87 | 0.96 | 10.50  | 0.86 | 0.96 | 1.06 | 9.00  | 0.97 | 1.06 | 1.15 | 7.50  | 1.02 | 1.10 | 1.14 | 6.00  | 1.05 | 1.10 | 1.12 | 4.50  | 1.09 | 1.12 | 1.12 | 3.00  | 1.15 | 1.16 | 1.14 | 1.50  | 1.26 | 1.26 | 1.20 | 0.00 | 1.45 | 1.45 | 1.43 | -- | - | - | - |
| Output Voltage [V]   | Load Current [A]       |  |                   |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
|  | Input Volt. 18[V]      | Input Volt. 24[V]  | Input Volt. 36[V] |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 14.25  | 0.66                   | 0.75   | 0.83              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 13.50  | 0.70                   | 0.78   | 0.87              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 12.00  | 0.77                   | 0.87   | 0.96              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 10.50  | 0.86                   | 0.96   | 1.06              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 9.00   | 0.97                   | 1.06   | 1.15              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 7.50   | 1.02                   | 1.10   | 1.14              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 6.00   | 1.05                   | 1.10   | 1.12              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 4.50   | 1.09                   | 1.12   | 1.12              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 3.00   | 1.15                   | 1.16   | 1.14              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 1.50   | 1.26                   | 1.26   | 1.20              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 0.00   | 1.45                   | 1.45   | 1.43              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| --   | -                      | -  | -                 |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| Object   | -15V0.35A              |  |                   |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 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>-14.25</td><td>0.66</td><td>0.75</td><td>0.83</td></tr><tr><td>-13.50</td><td>0.69</td><td>0.79</td><td>0.87</td></tr><tr><td>-12.00</td><td>0.77</td><td>0.86</td><td>0.95</td></tr><tr><td>-10.50</td><td>0.86</td><td>0.96</td><td>1.05</td></tr><tr><td>-9.00</td><td>0.97</td><td>1.07</td><td>1.14</td></tr><tr><td>-7.50</td><td>1.02</td><td>1.09</td><td>1.13</td></tr><tr><td>-6.00</td><td>1.04</td><td>1.10</td><td>1.12</td></tr><tr><td>-4.50</td><td>1.08</td><td>1.11</td><td>1.11</td></tr><tr><td>-3.00</td><td>1.14</td><td>1.16</td><td>1.13</td></tr><tr><td>-1.50</td><td>1.26</td><td>1.26</td><td>1.19</td></tr><tr><td>0.00</td><td>1.44</td><td>1.45</td><td>1.43</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td></tr></table> <div>+15V : Rated Load Current</div> |                   | Output Voltage [V] | Load Current [A] |  |  | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | -14.25 | 0.66 | 0.75 | 0.83 | -13.50 | 0.69 | 0.79 | 0.87 | -12.00 | 0.77 | 0.86 | 0.95 | -10.50 | 0.86 | 0.96 | 1.05 | -9.00 | 0.97 | 1.07 | 1.14 | -7.50 | 1.02 | 1.09 | 1.13 | -6.00 | 1.04 | 1.10 | 1.12 | -4.50 | 1.08 | 1.11 | 1.11 | -3.00 | 1.14 | 1.16 | 1.13 | -1.50 | 1.26 | 1.26 | 1.19 | 0.00 | 1.44 | 1.45 | 1.43 | -- | - | - | - |
| Output Voltage [V]   | Load Current [A]       |  |                   |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
|  | Input Volt. 18[V]      | Input Volt. 24[V]  | Input Volt. 36[V] |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -14.25   | 0.66                   | 0.75   | 0.83              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -13.50   | 0.69                   | 0.79   | 0.87              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -12.00   | 0.77                   | 0.86   | 0.95              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -10.50   | 0.86                   | 0.96   | 1.05              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -9.00  | 0.97                   | 1.07   | 1.14              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -7.50  | 1.02                   | 1.09   | 1.13              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -6.00  | 1.04                   | 1.10   | 1.12              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -4.50  | 1.08                   | 1.11   | 1.11              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -3.00  | 1.14                   | 1.16   | 1.13              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| -1.50  | 1.26                   | 1.26   | 1.19              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| 0.00   | 1.44                   | 1.45   | 1.43              |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| --   | -                      | -  | -                 |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |
| Note: Slanted line shows the range of the rated load current.  |                        |  |                   |                    |                  |  |  |                   |                   |                   |        |      |      |      |        |      |      |      |        |      |      |      |        |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |       |      |      |      |      |      |      |      |    |   |   |   |

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BC-12151

**COSEL**

|        |                           |                            |
|--------|---------------------------|----------------------------|
|        |                           | Testing Circuitry Figure A |
| Model  | MUW102415                 |                            |
| Item   | Ambient Temperature Drift |                            |
| Object | +15V0.35A                 |                            |

## 1.Values

Load 100%

| Ambient Temperature[°C] | Output Voltage [V] |                 |                 |
|-------------------------|--------------------|-----------------|-----------------|
|                         | Input Volt. 18V    | Input Volt. 24V | Input Volt. 36V |
| -40                     | 14.893             | 14.896          | 14.900          |
| 25                      | 15.015             | 15.018          | 15.020          |
| 85                      | 15.053             | 15.056          | 15.058          |

-15V: Load Current is same as +15V

|        |   |                            |
|--------|---|----------------------------|
| Item   | Minimum Input Voltage<br>for Regulated Output Voltage | Testing Circuitry Figure A |
| Object | +15V0.35A   |                            |

## 1.Values

| Ambient Temperature[°C] | Input Voltage [V] |           |
|-------------------------|-------------------|-----------|
|                         | Load 50%          | Load 100% |
| -40                     | 13.7              | 13.7      |
| 25                      | 13.7              | 13.7      |
| 85                      | 13.7              | 13.7      |

-15V: Load Current is same as +15V

**COSEL**

|        |                           |                            |
|--------|---------------------------|----------------------------|
|        |                           | Testing Circuitry Figure A |
| Model  | MUW102415                 |                            |
| Item   | Ambient Temperature Drift |                            |
| Object | -15V0.35A                 |                            |

## 1.Values

Load 100%

| Ambient Temperature[°C] | Output Voltage [V] |                 |                 |
|-------------------------|--------------------|-----------------|-----------------|
|                         | Input Volt. 18V    | Input Volt. 24V | Input Volt. 36V |
| -40                     | -14.938            | -14.937         | -14.935         |
| 25                      | -15.055            | -15.053         | -15.051         |
| 85                      | -15.088            | -15.086         | -15.085         |

+15V: Load Current is same as -15V

|        |   |                            |
|--------|---|----------------------------|
| Item   | Minimum Input Voltage<br>for Regulated Output Voltage | Testing Circuitry Figure A |
| Object | -15V0.35A   |                            |

## 1.Values

| Ambient Temperature[°C] | Input Voltage [V] |           |
|-------------------------|-------------------|-----------|
|                         | Load 50%          | Load 100% |
| -40                     | 13.7              | 13.7      |
| 25                      | 13.7              | 13.7      |
| 85                      | 13.7              | 13.7      |

+15V: Load Current is same as -15V

# COSEL

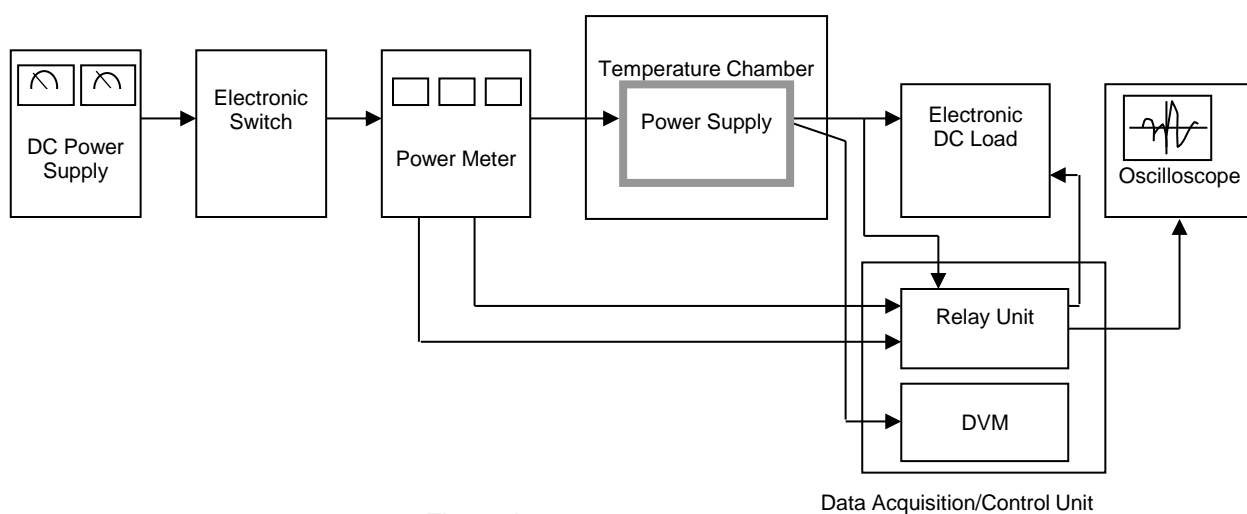


Figure A

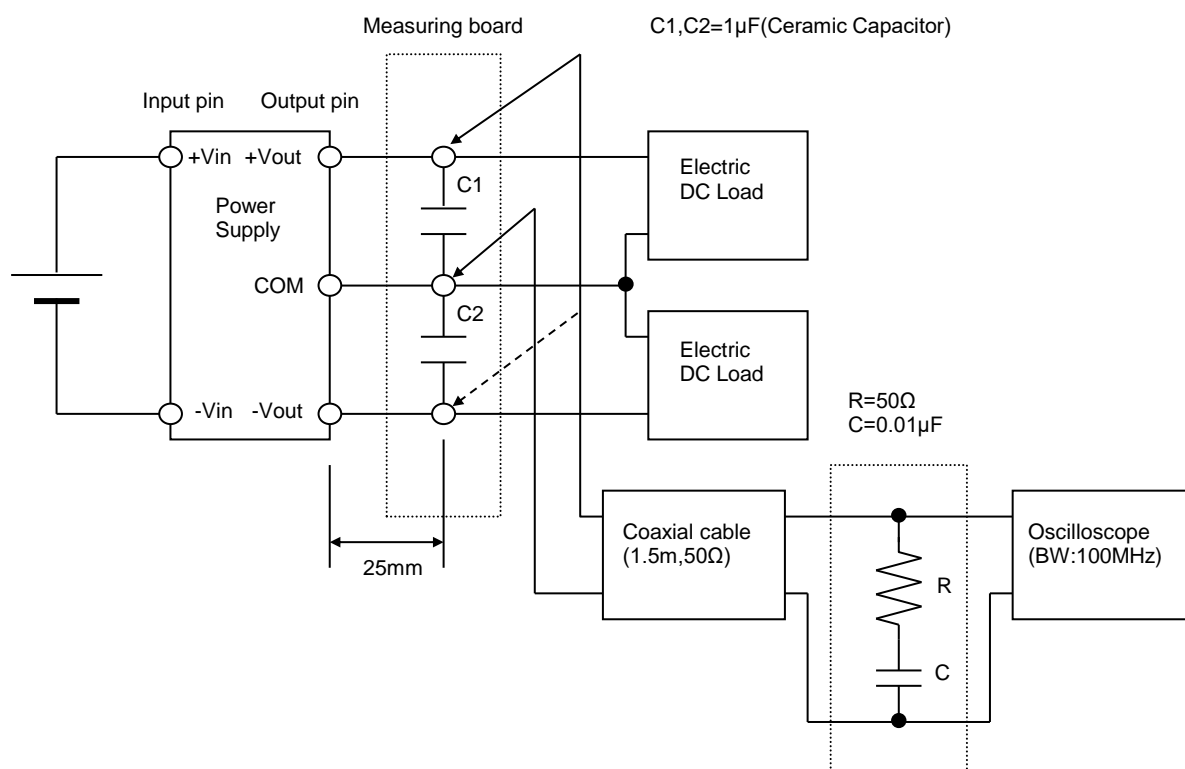


Figure B