参考資料

# TEST DATA OF MGW32412

Regulated DC Power Supply
November 8, 2016

Approved by : Takayuki Fukuda — Design Manager

Prepared by : Takaaki Sekiguchi — Design Engineer

**COSEL CO.,LTD.**

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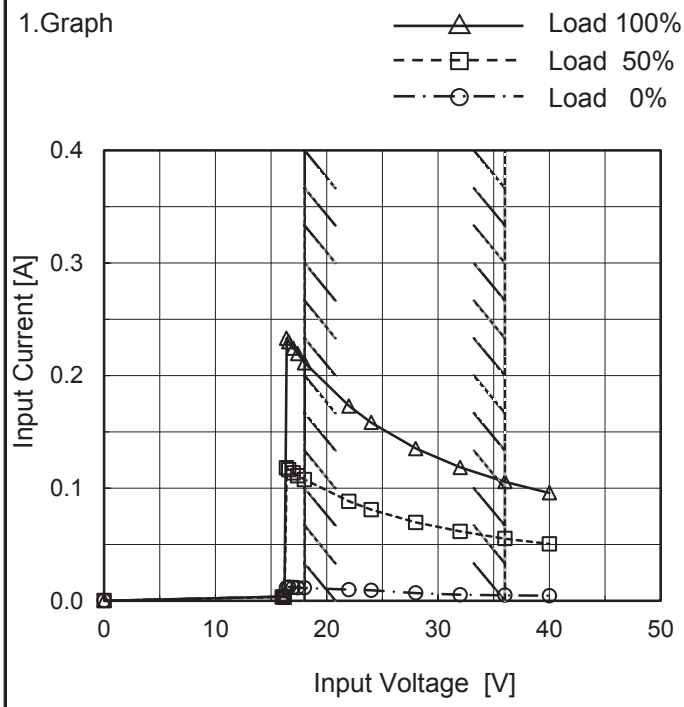
| | |
|---|---|
| Model | MGW32412 |
| Item | Input Current (by Input Voltage) |
| Object | ———————— |

Temperature 25°C
Testing Circuitry Figure A

1.Graph




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

2.Values

| Input Voltage [V] | Input Current [A] | | |
|---|---|---|---|
| | Load 0% | Load 50% | Load 100% |
| 0.0 | 0.000 | 0.000 | 0.000 |
| 16.0 | 0.004 | 0.003 | 0.004 |
| 16.2 | 0.003 | 0.004 | 0.003 |
| 16.4 | 0.012 | 0.118 | 0.233 |
| 16.6 | 0.012 | 0.116 | 0.230 |
| 17.0 | 0.012 | 0.114 | 0.224 |
| 17.4 | 0.012 | 0.111 | 0.219 |
| 18.0 | 0.011 | 0.108 | 0.211 |
| 22.0 | 0.010 | 0.088 | 0.173 |
| 24.0 | 0.009 | 0.081 | 0.158 |
| 28.0 | 0.007 | 0.070 | 0.135 |
| 32.0 | 0.005 | 0.062 | 0.118 |
| 36.0 | 0.005 | 0.055 | 0.106 |
| 40.0 | 0.004 | 0.050 | 0.096 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |



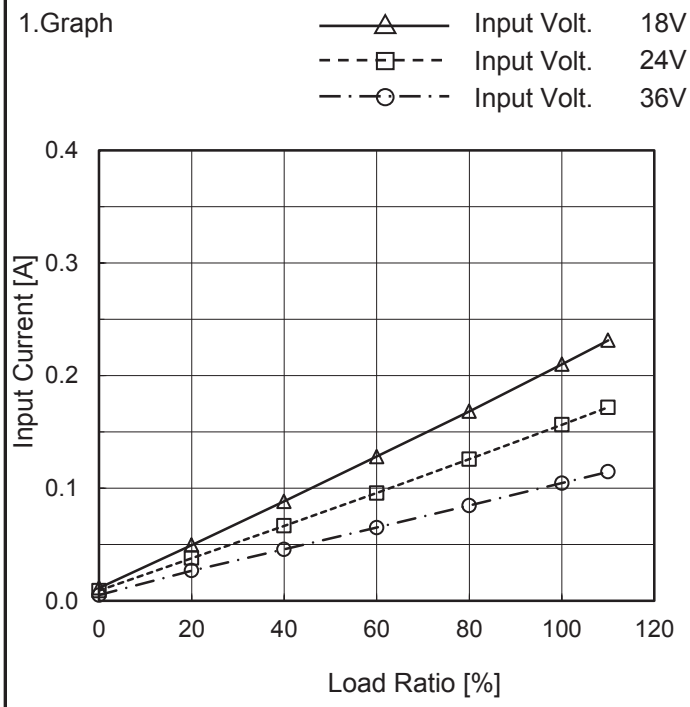
BC-10994

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Input Current (by Load Ratio) |
| Object | ———————— |

Temperature 25°C
Testing Circuitry Figure A

1.Graph




2.Values

| Load Ratio [%] | Input Current [A] | | |
|---|---|---|---|
| | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| 0 | 0.011 | 0.009 | 0.005 |
| 20 | 0.050 | 0.038 | 0.027 |
| 40 | 0.088 | 0.067 | 0.046 |
| 60 | 0.128 | 0.096 | 0.065 |
| 80 | 0.168 | 0.126 | 0.085 |
| 100 | 0.210 | 0.156 | 0.104 |
| 110 | 0.231 | 0.172 | 0.115 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |



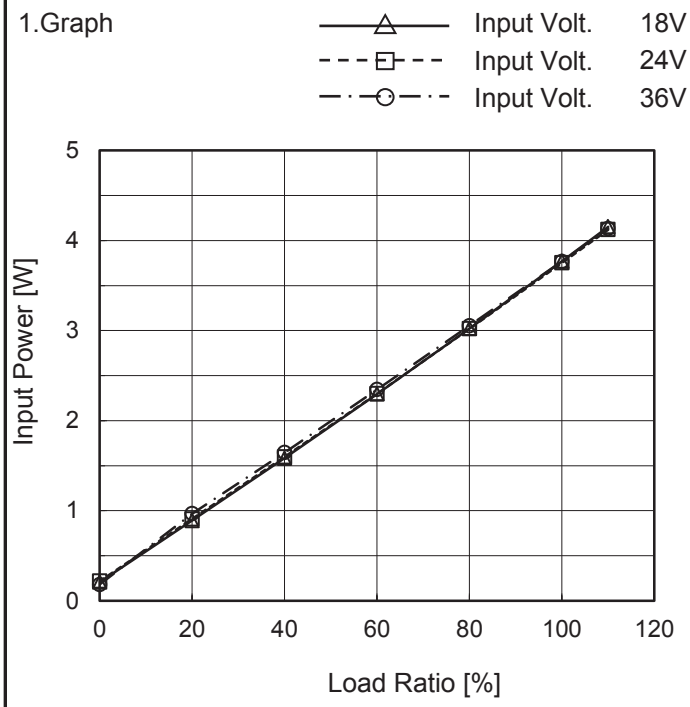
BC-10994

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Input Power (by Load Ratio) |
| Object | ———————— |

Temperature 25°C
Testing Circuitry Figure A

1.Graph




2.Values

| Load Ratio [%] | Input Power [W] | | |
|---|---|---|---|
| | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| 0 | 0.21 | 0.22 | 0.18 |
| 20 | 0.89 | 0.91 | 0.97 |
| 40 | 1.58 | 1.60 | 1.65 |
| 60 | 2.29 | 2.30 | 2.35 |
| 80 | 3.02 | 3.02 | 3.05 |
| 100 | 3.77 | 3.75 | 3.77 |
| 110 | 4.15 | 4.12 | 4.13 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |



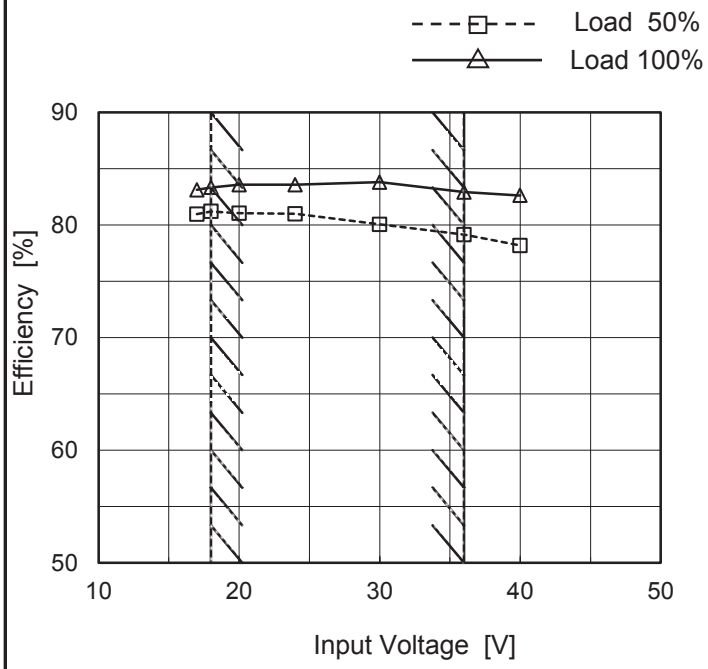
BC-10994

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Efficiency (by Input Voltage) |
| Object | ——————————— |

Temperature 25°C
Testing Circuitry Figure A

1.Graph




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

2.Values

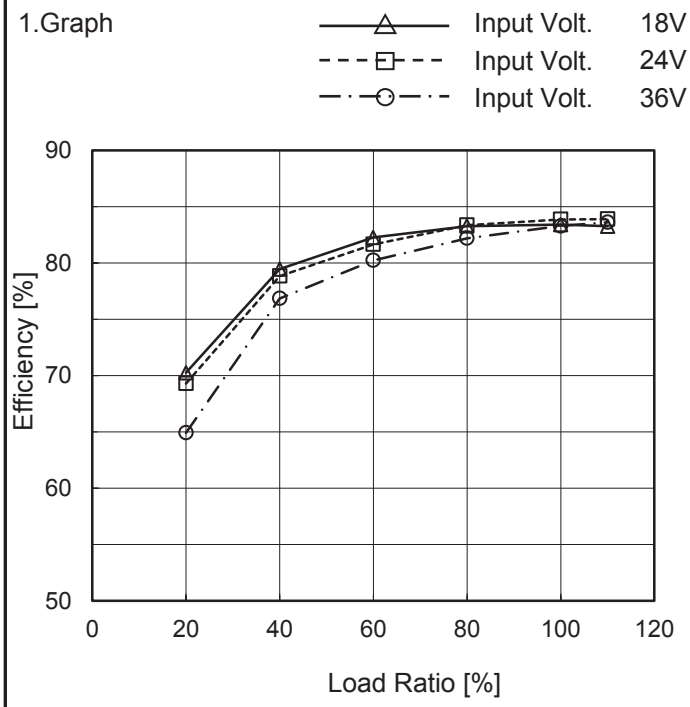
| Input Voltage [V] | Efficiency [%] | |
|---|---|---|
| | Load 50% | Load 100% |
| 17 | 81.0 | 83.1 |
| 18 | 81.2 | 83.3 |
| 20 | 81.1 | 83.6 |
| 24 | 81.0 | 83.6 |
| 30 | 80.1 | 83.8 |
| 36 | 79.2 | 82.9 |
| 40 | 78.2 | 82.6 |
| -- | - | - |
| -- | - | - |

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Efficiency (by Load Ratio) |
| Object | ———————— |

Temperature 25°C
Testing Circuitry Figure A

1.Graph




2.Values

| Load Ratio [%] | Efficiency [%] | | |
|---|---|---|---|
| | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| 0 | - | - | - |
| 20 | 70.3 | 69.3 | 64.9 |
| 40 | 79.5 | 78.8 | 76.9 |
| 60 | 82.3 | 81.7 | 80.2 |
| 80 | 83.3 | 83.4 | 82.2 |
| 100 | 83.4 | 83.9 | 83.3 |
| 110 | 83.3 | 83.9 | 83.6 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |



BC-10994

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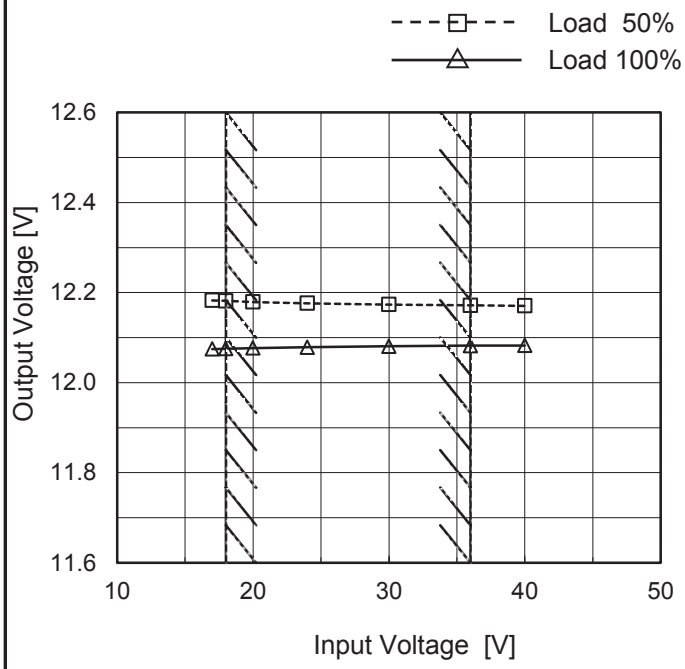
| | |
|---|---|
| Model | MGW32412 |
| Item | Line Regulation |
| Object | +12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

1.Graph



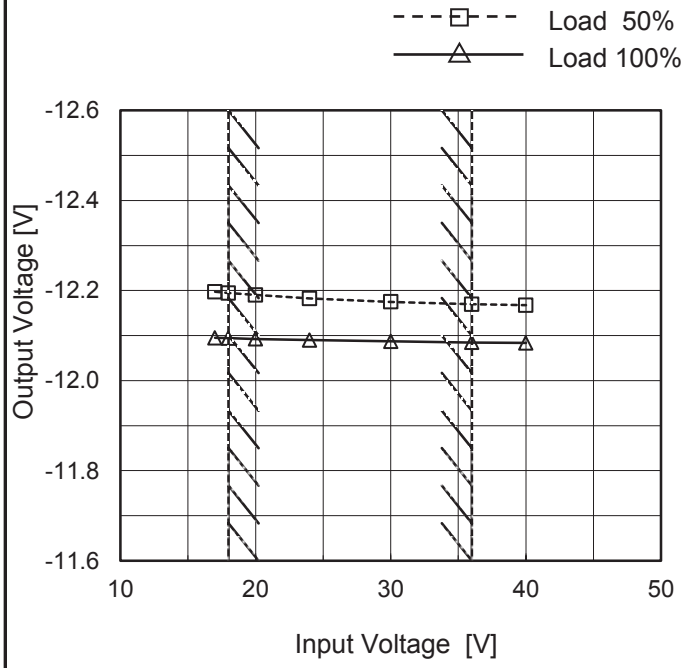

2.Values

| Input Voltage [V] | Output Voltage [V] | |
|---|---|---|
| | Load 50% | Load 100% |
| 17 | 12.183 | 12.075 |
| 18 | 12.182 | 12.076 |
| 20 | 12.179 | 12.077 |
| 24 | 12.176 | 12.079 |
| 30 | 12.173 | 12.081 |
| 36 | 12.172 | 12.082 |
| 40 | 12.171 | 12.083 |
| -- | - | - |
| -- | - | - |

-12V: Rated Load Current

| | |
|---|---|
| Object | -12V0.13A |

1.Graph




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

2.Values

| Input Voltage [V] | Output Voltage [V] | |
|---|---|---|
| | Load 50% | Load 100% |
| 17 | -12.197 | -12.095 |
| 18 | -12.194 | -12.094 |
| 20 | -12.190 | -12.093 |
| 24 | -12.182 | -12.090 |
| 30 | -12.175 | -12.087 |
| 36 | -12.170 | -12.085 |
| 40 | -12.167 | -12.083 |
| -- | - | - |
| -- | - | - |

+12V: Rated Load Current



BC-10994

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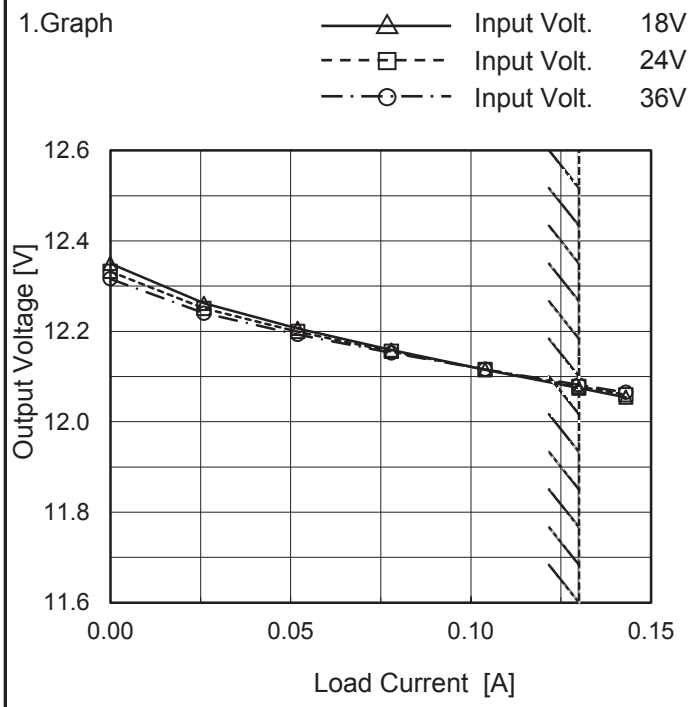
| | |
|---|---|
| Model | MGW32412 |
| Item | Load Regulation |
| Object | +12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

1.Graph



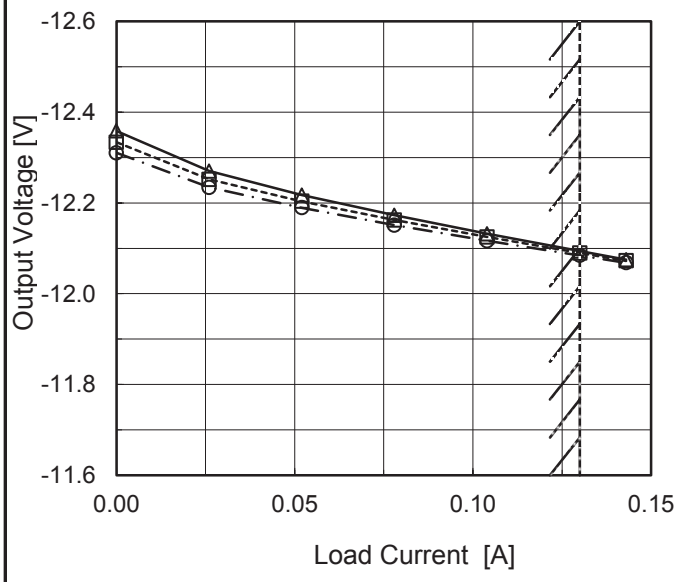

2.Values

| Load Current [A] | Output Voltage [V] Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
|---|---|---|---|
| 0.000 | 12.350 | 12.332 | 12.316 |
| 0.026 | 12.262 | 12.251 | 12.240 |
| 0.052 | 12.207 | 12.199 | 12.193 |
| 0.078 | 12.159 | 12.155 | 12.152 |
| 0.104 | 12.115 | 12.115 | 12.116 |
| 0.130 | 12.074 | 12.078 | 12.082 |
| 0.143 | 12.054 | 12.060 | 12.065 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |

-12V: Rated Load Current

| | |
|---|---|
| Object | -12V0.13A |

1.Graph




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

2.Values

| Load Current [A] | Output Voltage [V] Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
|---|---|---|---|
| 0.000 | -12.359 | -12.334 | -12.311 |
| 0.026 | -12.270 | -12.252 | -12.234 |
| 0.052 | -12.217 | -12.204 | -12.190 |
| 0.078 | -12.173 | -12.162 | -12.151 |
| 0.104 | -12.132 | -12.125 | -12.116 |
| 0.130 | -12.094 | -12.090 | -12.084 |
| 0.143 | -12.075 | -12.072 | -12.068 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |

+12V: Rated Load Current



BC-10994

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| | |
|---|---|
| Model | MGW32412 |
| Item | Dynamic Load Response |
| Object | +12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

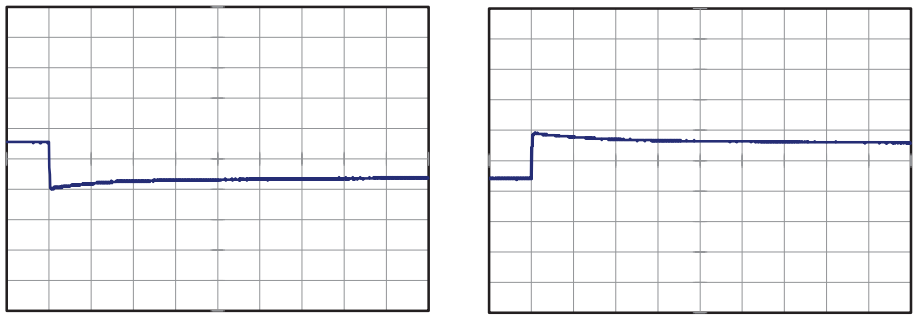
Input Volt. 24 V
-12V:rated load current.
Cycle 100 ms

t1,t2 = 100 μ s

Load Current

t1 t2

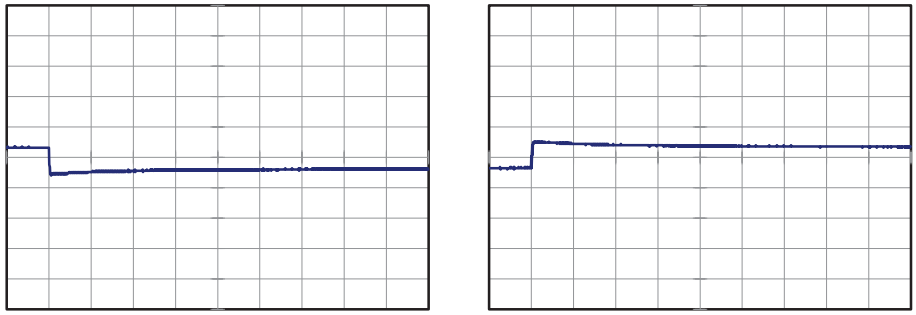
Min.Load (0A)←→
Load 100% (0.13A)



200 mV/div

4 ms/div 4 ms/div

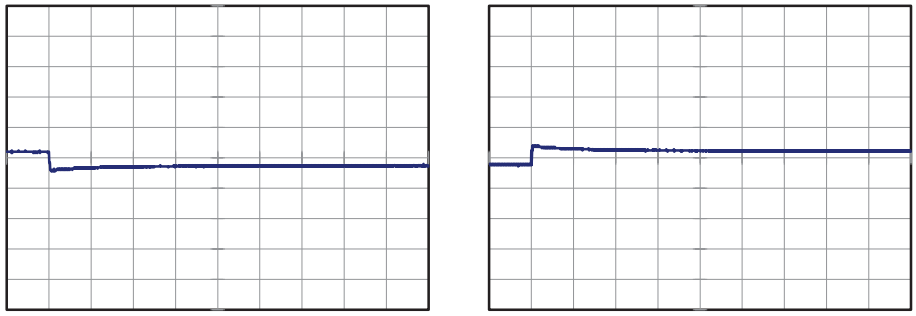
Min.Load (0A)←→
Load 50% (0.065A)



200 mV/div

4 ms/div 4 ms/div

Load 50% (0.065A)←→
Load 100% (0.13A)



200 mV/div

4 ms/div 4 ms/div

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Dynamic Load Response |
| Object | -12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

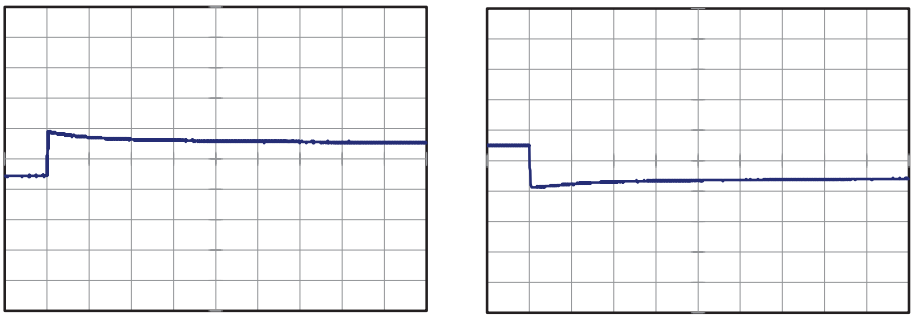
Input Volt. 24 V
+12V:rated load current.
Cycle 100 ms

t1,t2 = 100 μ s

Load Current

t1 t2

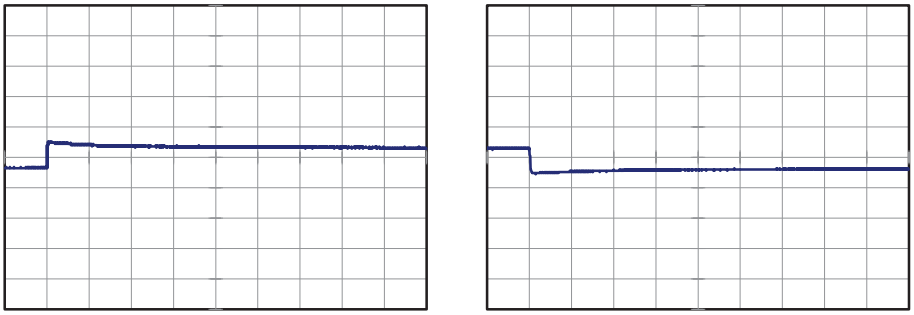
Min.Load (0A)←→
Load 100% (0.13A)



200 mV/div

4 ms/div 4 ms/div

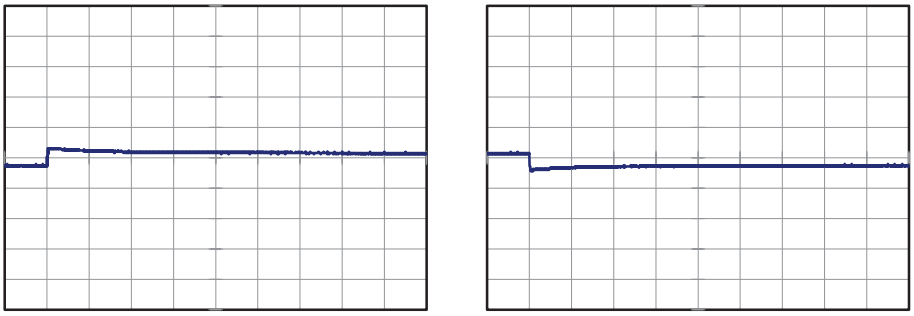
Min.Load (0A)←→
Load 50% (0.065A)



200 mV/div

4 ms/div 4 ms/div

Load 50% (0.065A)←→
Load 100% (0.13A)



200 mV/div

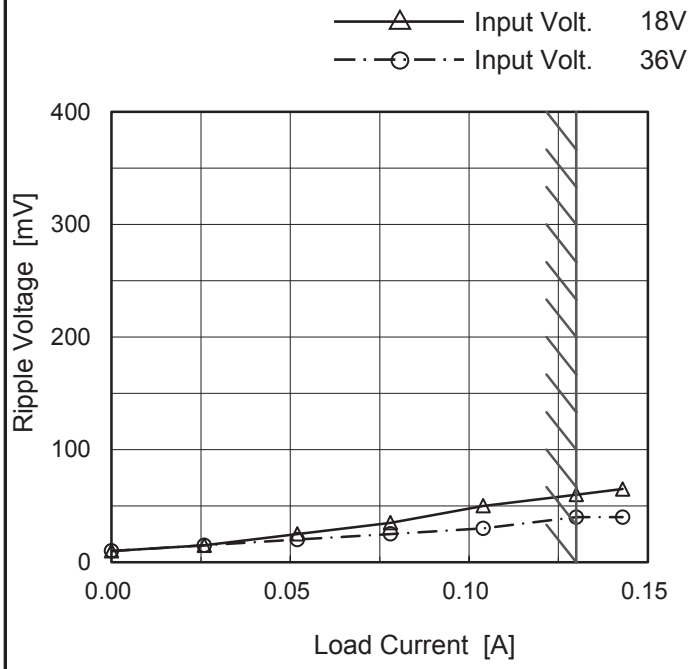
4 ms/div 4 ms/div

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Ripple Voltage (by Load Current) |
| Object | +12V0.13A |

Temperature 25°C
Testing Circuitry Figure B

1.Graph




Measured by 100 MHz Oscilloscope.
Ripple Voltage is shown as p-p in the figure below.
Note: Slanted line shows the range of the rated load current.

Ripple [mVp-p]

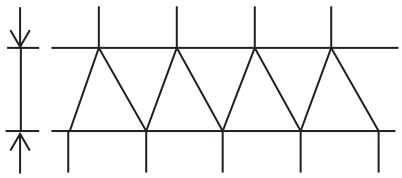


Fig.Complex Ripple Wave Form

2.Values

| Load Current [A] | Ripple Voltage [mV] Input Volt. 18 [V] | Ripple Voltage [mV] Input Volt. 36 [V] |
|---|---|---|
| 0.000 | 10 | 10 |
| 0.026 | 15 | 15 |
| 0.052 | 25 | 20 |
| 0.078 | 35 | 25 |
| 0.104 | 50 | 30 |
| 0.130 | 60 | 40 |
| 0.143 | 65 | 40 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

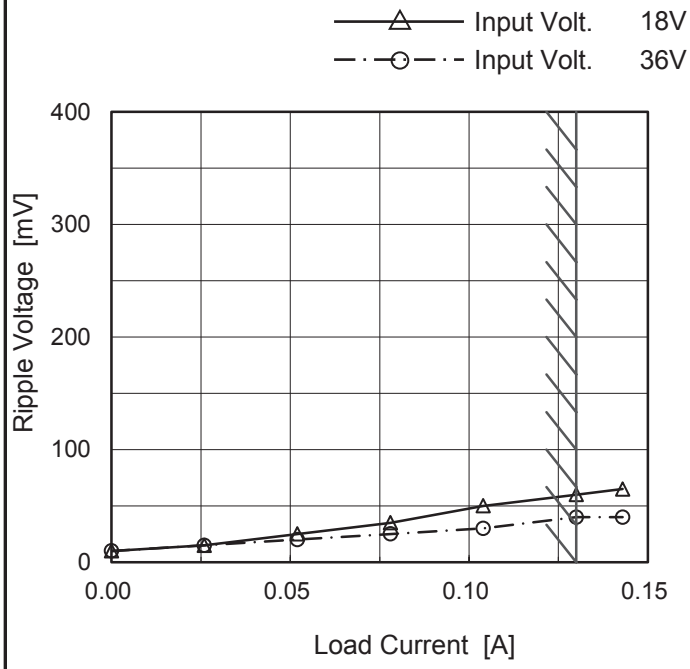
-12V: Rated Load Current

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Ripple Voltage (by Load Current) |
| Object | -12V0.13A |

Temperature 25°C
Testing Circuitry Figure B

1.Graph




Measured by 100 MHz Oscilloscope.
Ripple Voltage is shown as p-p in the figure below.
Note: Slanted line shows the range of the rated load current.

Ripple [mVp-p]

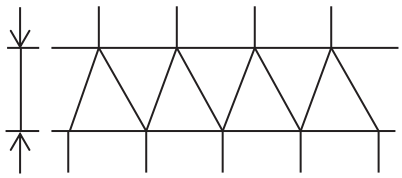


Fig.Complex Ripple Wave Form

2.Values

| Load Current [A] | Ripple Voltage [mV] Input Volt. 18 [V] | Ripple Voltage [mV] Input Volt. 36 [V] |
|---|---|---|
| 0.000 | 10 | 10 |
| 0.026 | 15 | 15 |
| 0.052 | 25 | 20 |
| 0.078 | 35 | 25 |
| 0.104 | 50 | 30 |
| 0.130 | 60 | 40 |
| 0.143 | 65 | 40 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

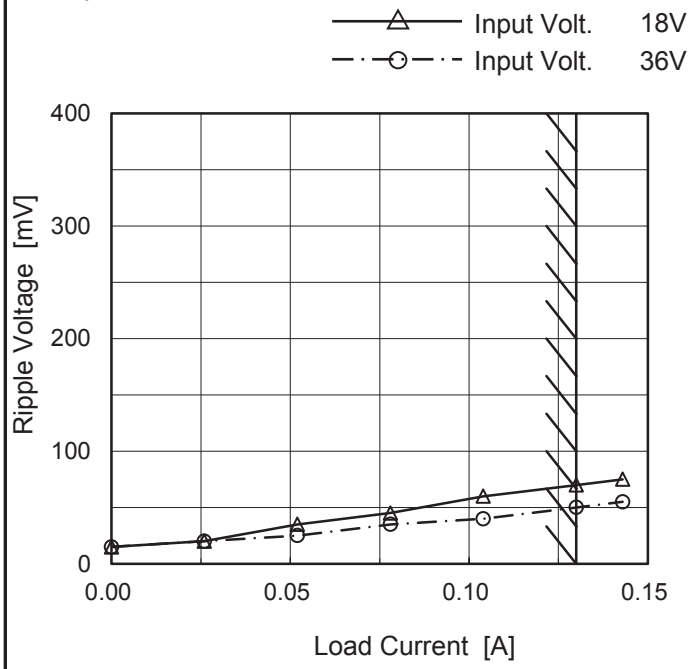
+12V: Rated Load Current

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Ripple-Noise |
| Object | +12V0.13A |

Temperature 25°C
Testing Circuitry Figure B

1.Graph




Measured by 100 MHz Oscilloscope.
Ripple-Noise is shown as p-p in the figure below.
Note: Slanted line shows the range of the rated load current.

Ripple Noise[mVp-p]

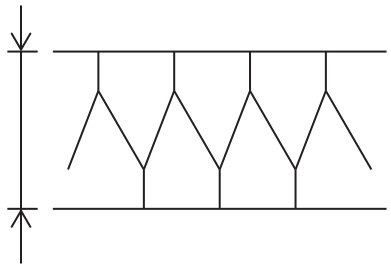


Fig.Complex Ripple Noise Wave Form

2.Values

| Load Current [A] | Ripple-Noise [mV] | |
|---|---|---|
| | Input Volt. 18 [V] | Input Volt. 36 [V] |
| 0.000 | 15 | 15 |
| 0.026 | 20 | 20 |
| 0.052 | 35 | 25 |
| 0.078 | 45 | 35 |
| 0.104 | 60 | 40 |
| 0.130 | 70 | 50 |
| 0.143 | 75 | 55 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

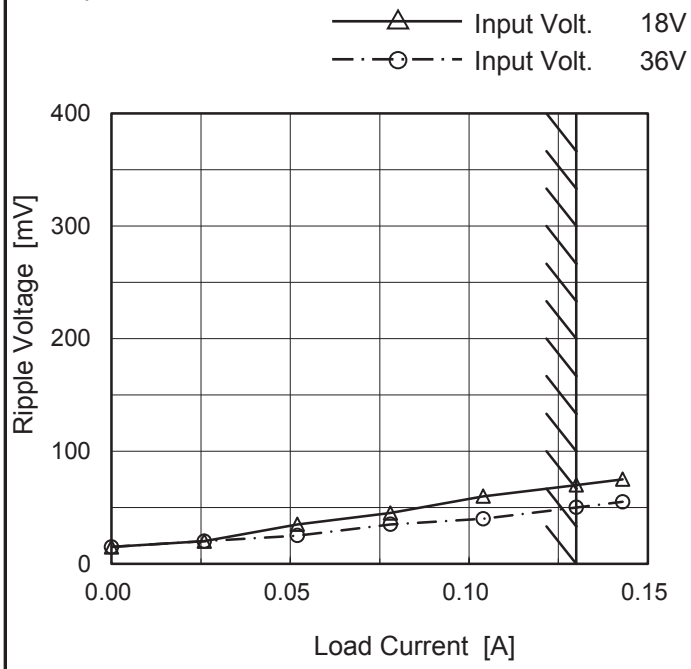
-12V: Rated Load Current

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Ripple-Noise |
| Object | -12V0.13A |

Temperature 25°C
Testing Circuitry Figure B

1.Graph




Measured by 100 MHz Oscilloscope.
Ripple-Noise is shown as p-p in the figure below.
Note: Slanted line shows the range of the rated load current.

Ripple Noise[mVp-p]

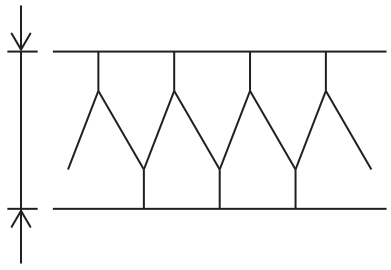


Fig.Complex Ripple Noise Wave Form

2.Values

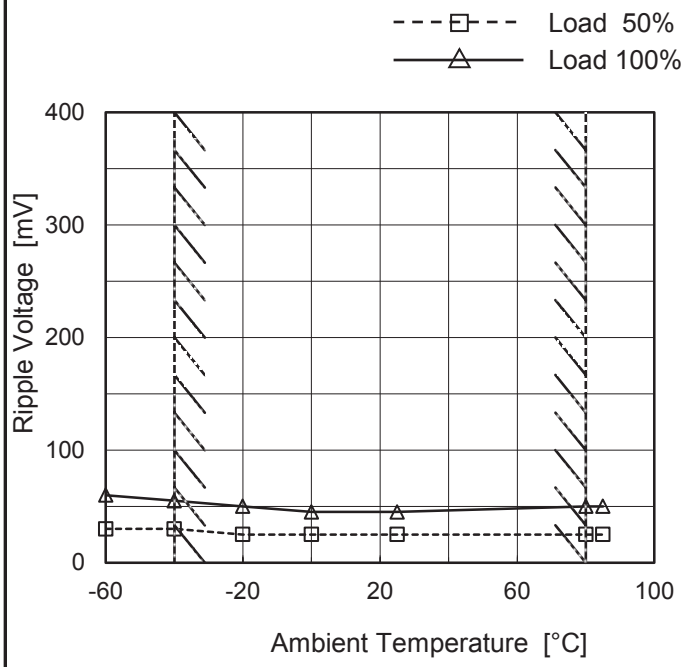
| Load Current [A] | Ripple-Noise [mV] | |
|---|---|---|
| | Input Volt. 18 [V] | Input Volt. 36 [V] |
| 0.000 | 15 | 15 |
| 0.026 | 20 | 20 |
| 0.052 | 35 | 25 |
| 0.078 | 45 | 35 |
| 0.104 | 60 | 40 |
| 0.130 | 70 | 50 |
| 0.143 | 75 | 55 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

+12V: Rated Load Current

COSEL

| Model | MGW32412 | |
|---|---|---|
| Item | Ripple Voltage (by Ambient Temp.) | Testing Circuitry Figure B |
| Object | +12V0.13A | |

1.Graph




Input Volt. 24V

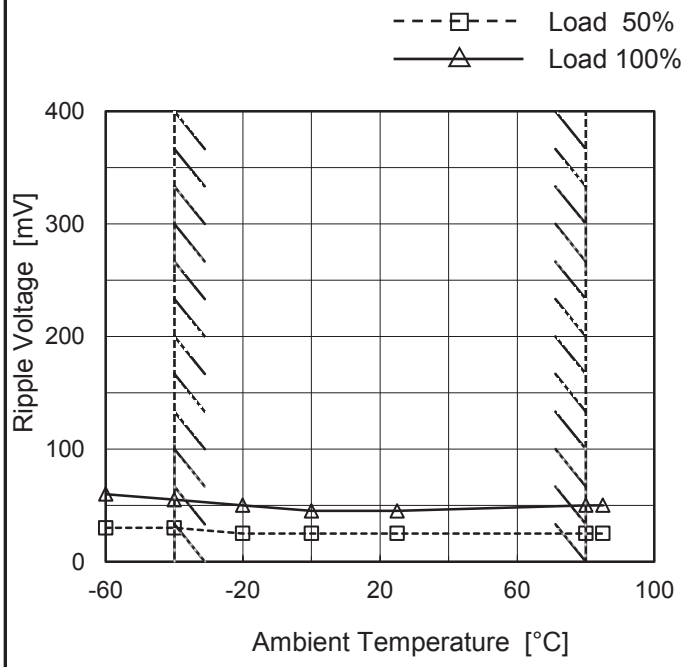
2.Values

| Ambient Temperature [°C] | Ripple Voltage [mV] | |
|---|---|---|
| | Load 50% | Load 100% |
| -60 | 30 | 60 |
| -40 | 30 | 55 |
| -20 | 25 | 50 |
| 0 | 25 | 45 |
| 25 | 25 | 45 |
| 80 | 25 | 50 |
| 85 | 25 | 50 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

-12V: Rated Load Current

| Object | -12V0.13A |
|---|---|

1.Graph




Input Volt. 24V

Measured by 100 MHz Oscilloscope.

Note: Slanted line shows the range of the rated ambient temperature.

2.Values

| Ambient Temperature [°C] | Ripple Voltage [mV] | |
|---|---|---|
| | Load 50% | Load 100% |
| -60 | 30 | 60 |
| -40 | 30 | 55 |
| -20 | 25 | 50 |
| 0 | 25 | 45 |
| 25 | 25 | 45 |
| 80 | 25 | 50 |
| 85 | 25 | 50 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

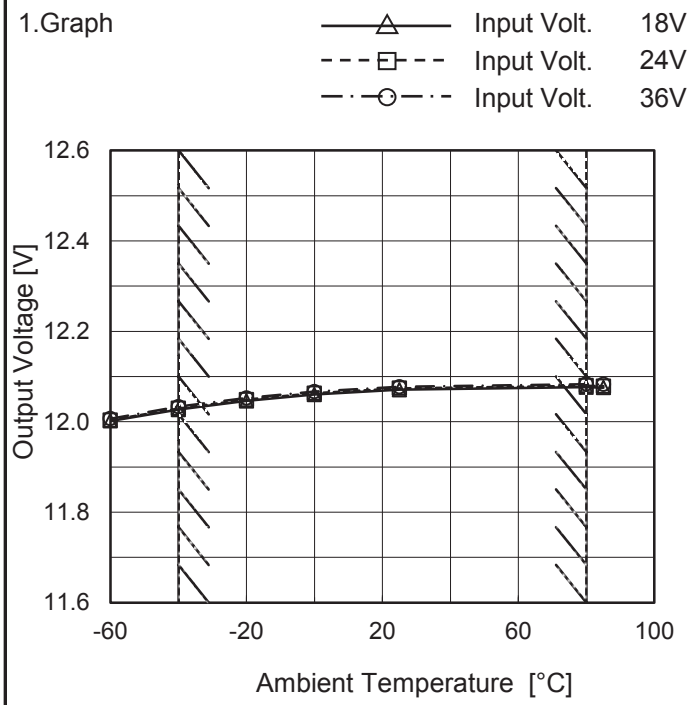
+12V: Rated Load Current

COSEL

| Model | MGW32412 |
|---|---|
| Item | Ambient Temperature Drift |
| Object | +12V0.13A |

Testing Circuitry Figure A

1.Graph




Load 100%

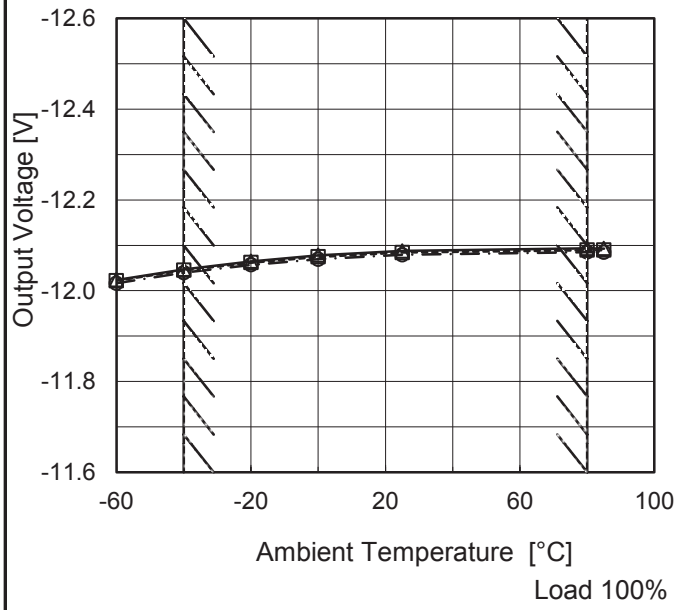
2.Values

| Ambient Temperature [°C] | Output Voltage [V] | | |
|---|---|---|---|
| | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| -60 | 12.002 | 12.004 | 12.007 |
| -40 | 12.027 | 12.030 | 12.033 |
| -20 | 12.046 | 12.049 | 12.053 |
| 0 | 12.060 | 12.063 | 12.067 |
| 25 | 12.071 | 12.074 | 12.077 |
| 80 | 12.077 | 12.080 | 12.083 |
| 85 | 12.076 | 12.079 | 12.082 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |

-12V: Rated Load Current

| Object | -12V0.13A |
|---|---|

1.Graph




Load 100%

Note: Slanted line shows the range of the rated ambient temperature.

2.Values

| Ambient Temperature [°C] | Output Voltage [V] | | |
|---|---|---|---|
| | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| -60 | -12.024 | -12.022 | -12.016 |
| -40 | -12.047 | -12.045 | -12.040 |
| -20 | -12.065 | -12.062 | -12.057 |
| 0 | -12.078 | -12.075 | -12.069 |
| 25 | -12.088 | -12.084 | -12.079 |
| 80 | -12.093 | -12.089 | -12.085 |
| 85 | -12.093 | -12.089 | -12.085 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |

+12V: Rated Load Current

| Model | MGW32412 | |
|---|---|---|
| Item | Output Voltage Accuracy | Testing Circuitry Figure A |

1.Output Voltage Accuracy

This is defined as the value of the output voltage, regulation load, ambient temperature and input voltage varied at random in the range as specified below.

Temperature : -40 - 80°C
Input Voltage : 18 - 36V
Load Current (AVR 1) : 0 - 0.13A (AVR 2) : 0 - 0.13A

* Output Voltage Accuracy = ±(Maximum of Output Voltage - Minimum of Output Voltage) / 2

$$\text{* Output Voltage Accuracy (Ratio)} = \frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$$

2.Values

| Object | +12V0.13A | | | | | |
|---|---|---|---|---|---|---|
| Item | Temperature [°C] | Input Voltage[V] | Output | | Output Voltage Accuracy | |
| | | | Current[A] | Voltage[V] | Value [mV] | Ratio [%] |
| Maximum Voltage | 80 | 18 | 0 | 12.365 | ±289 | ±2.4 |
| Minimum Voltage | -40 | 18 | 0.13 | 11.787 | | |

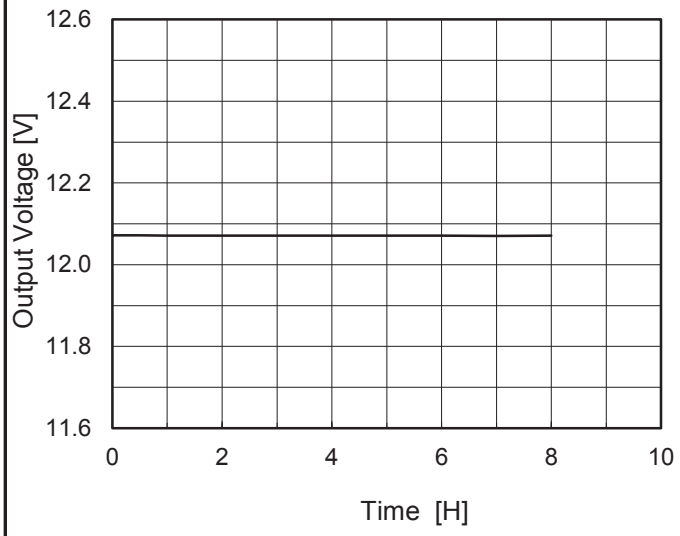
| Object | -12V0.13A | | | | | |
|---|---|---|---|---|---|---|
| Item | Temperature [°C] | Input Voltage[V] | Output | | Output Voltage Accuracy | |
| | | | Current[A] | Voltage[V] | Value [mV] | Ratio [%] |
| Maximum Voltage | 80 | 18 | 0 | -12.371 | ±287 | ±2.4 |
| Minimum Voltage | -40 | 18 | 0.13 | -11.798 | | |

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Time Lapse Drift |
| Object | +12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

1.Graph




Input Volt. 24V
Load 100%

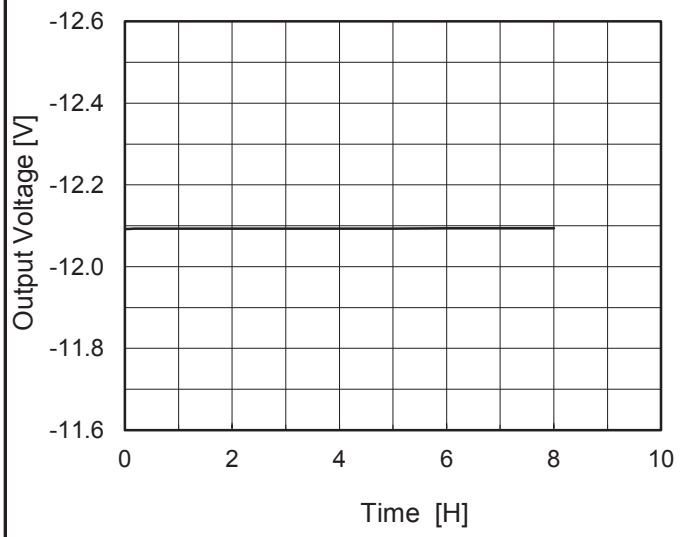
2.Values

| Time since start [H] | Output Voltage [V] |
|---|---|
| 0.0 | 12.069 |
| 0.5 | 12.072 |
| 1.0 | 12.071 |
| 2.0 | 12.071 |
| 3.0 | 12.071 |
| 4.0 | 12.071 |
| 5.0 | 12.071 |
| 6.0 | 12.071 |
| 7.0 | 12.071 |
| 8.0 | 12.071 |

-12V: Rated Load Current

| | |
|---|---|
| Object | -12V0.13A |

1.Graph




Input Volt. 24V
Load 100%

2.Values

| Time since start [H] | Output Voltage [V] |
|---|---|
| 0.0 | -12.090 |
| 0.5 | -12.093 |
| 1.0 | -12.093 |
| 2.0 | -12.093 |
| 3.0 | -12.093 |
| 4.0 | -12.093 |
| 5.0 | -12.093 |
| 6.0 | -12.094 |
| 7.0 | -12.094 |
| 8.0 | -12.094 |

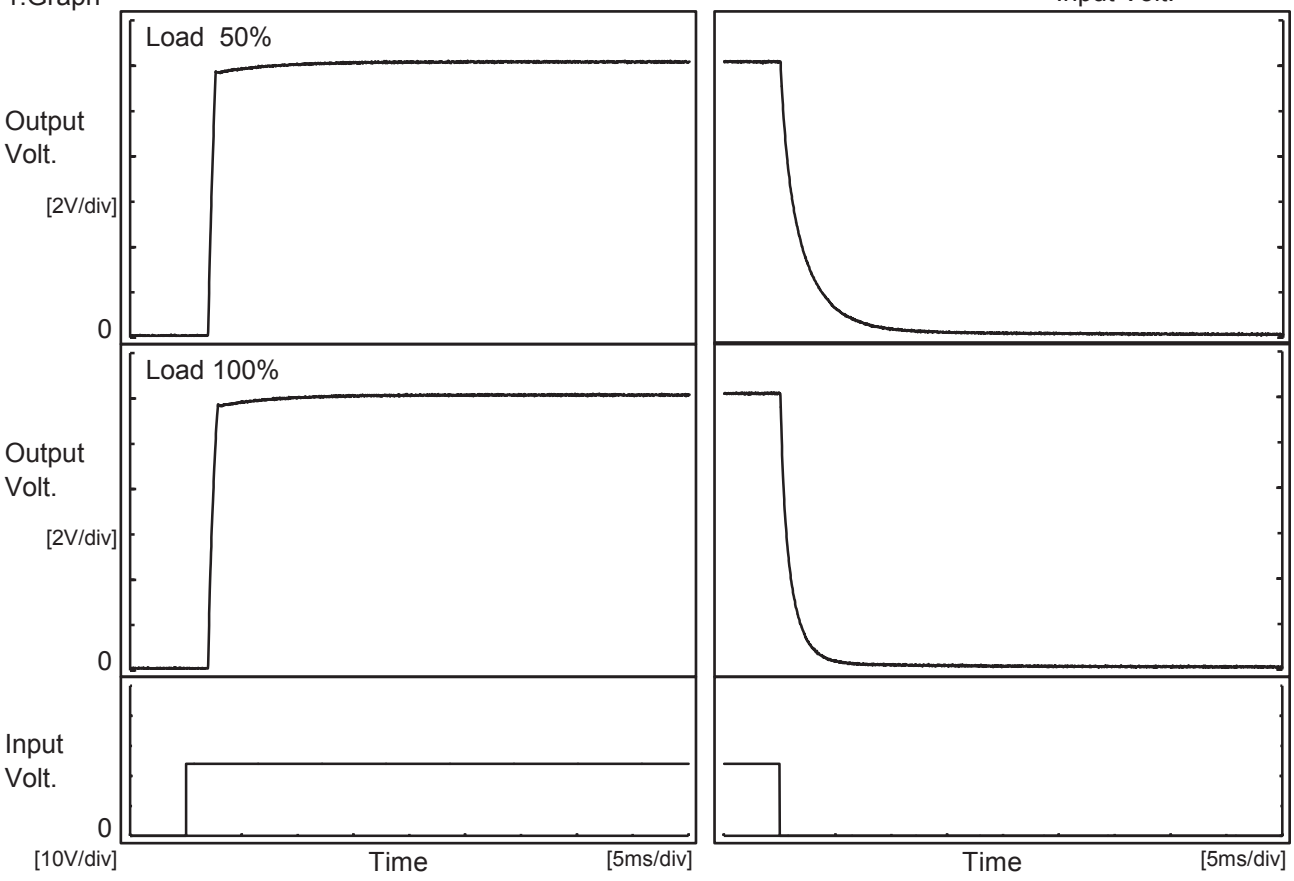
+12V: Rated Load Current

COSEL

| | | |
|---|---|---|
| Model | MGW32412 | |
| Item | Rise and Fall Time | Temperature 25°C<br>Testing Circuitry Figure A |
| Object | +12V0.13A | |

1.Graph

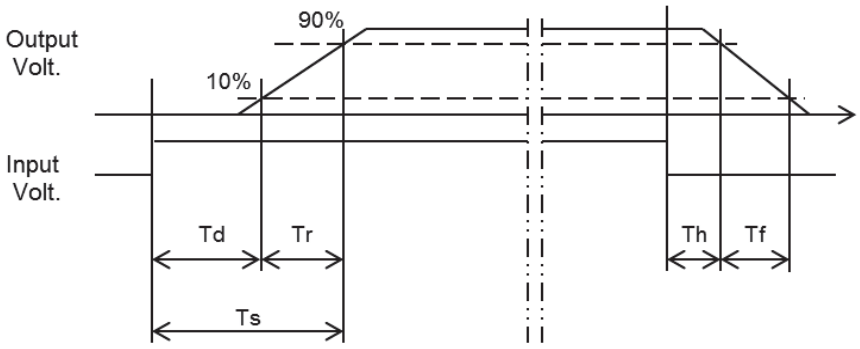
Input Volt. 24 V




2.Values

[ms]

| Load \ Time | Td | Tr | Ts | Th | Tf |
|---|---|---|---|---|---|
| 50 % | 2.0 | 0.6 | 2.6 | 0.2 | 4.9 |
| 100 % | 2.0 | 0.7 | 2.7 | 0.1 | 2.3 |






BC-10994

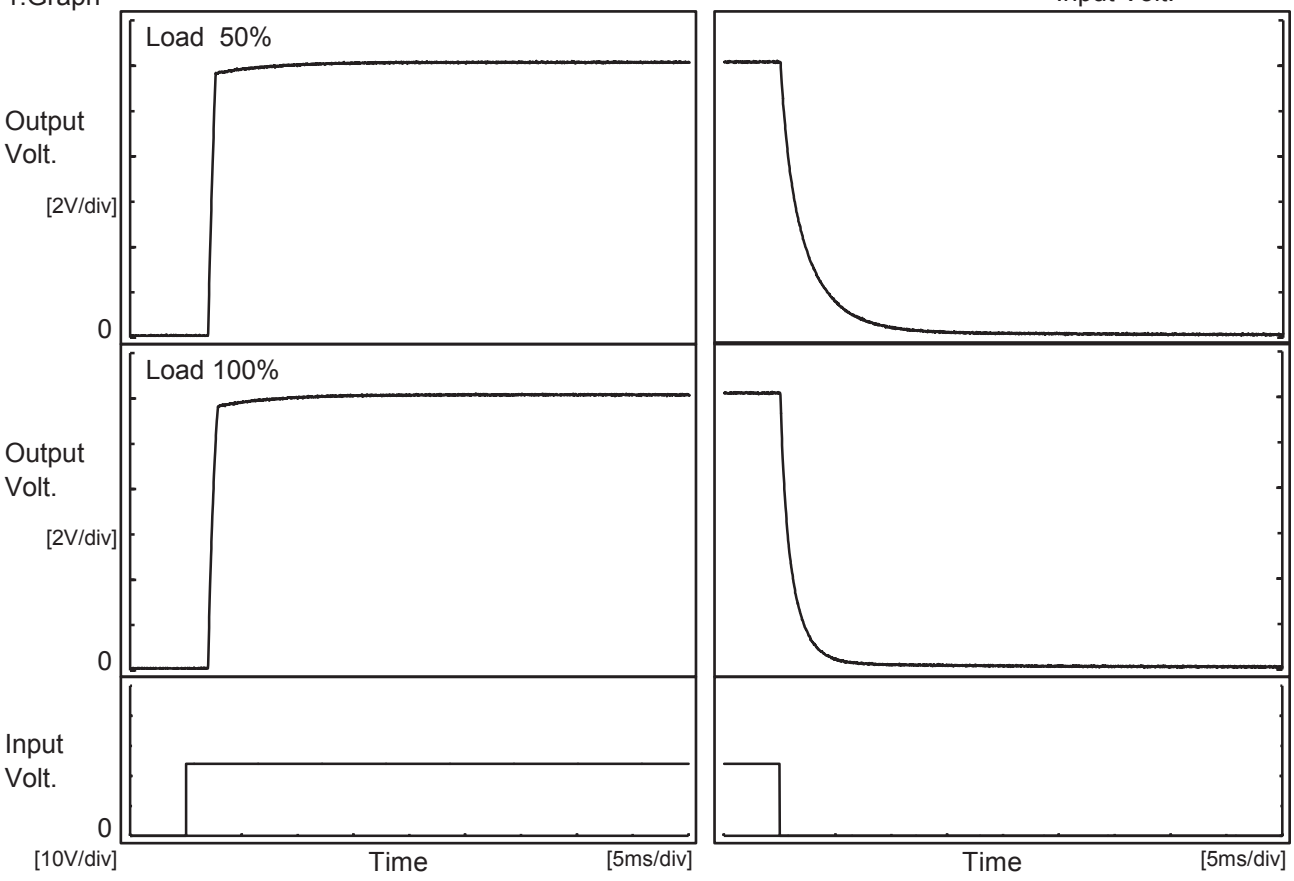
COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Rise and Fall Time |
| Object | -12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

1.Graph

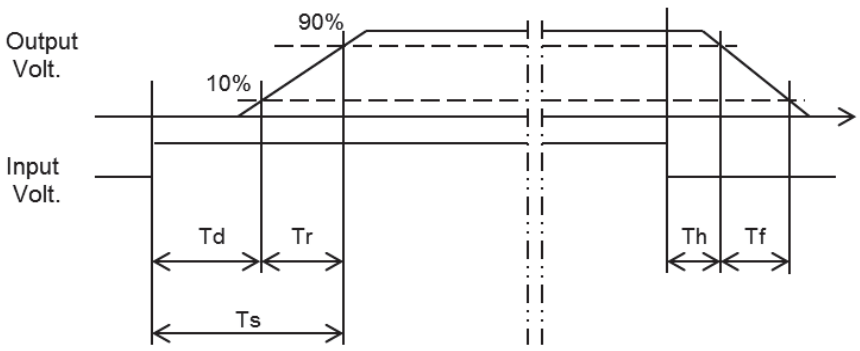
Input Volt. 24 V




2.Values

[ms]

| Load \ Time | Td | Tr | Ts | Th | Tf |
|---|---|---|---|---|---|
| 50 % | 2.0 | 0.6 | 2.6 | 0.2 | 5.5 |
| 100 % | 2.0 | 0.7 | 2.7 | 0.1 | 2.7 |





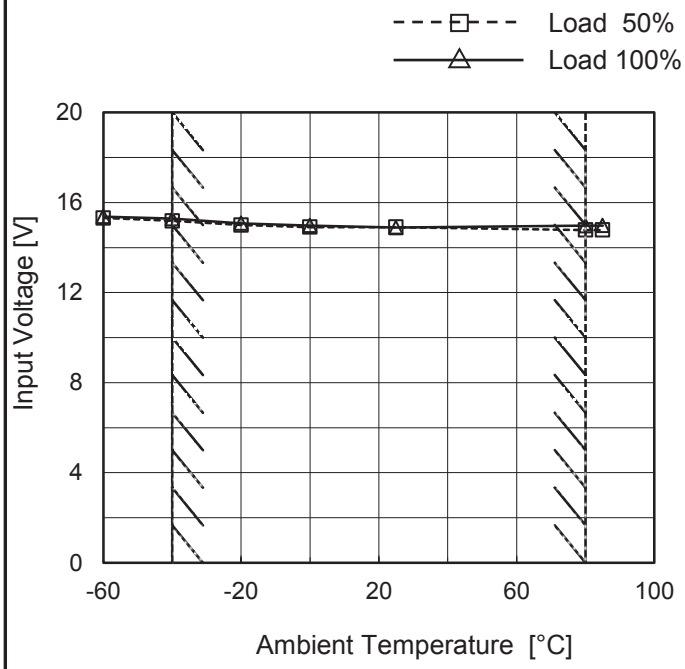

BC-10994

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Minimum Input Voltage for Regulated Output Voltage |
| Object | +12V0.13A |

Testing Circuitry Figure A

1.Graph

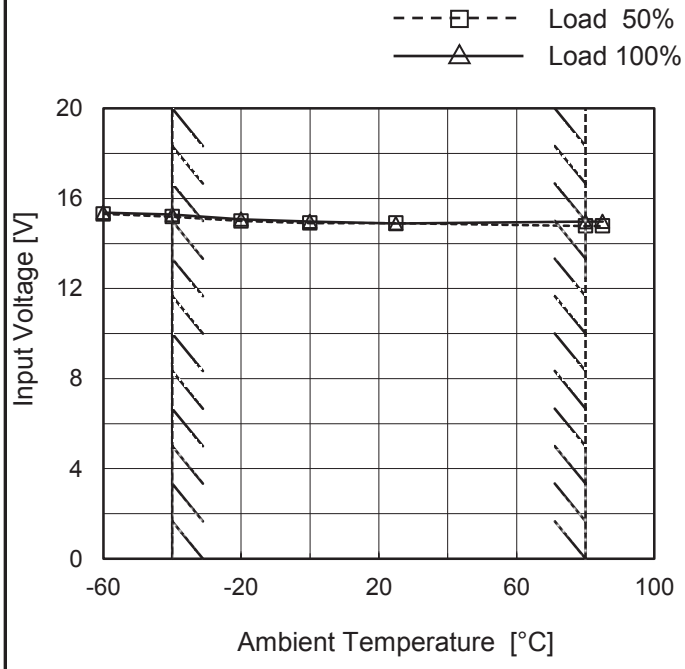



2.Values

| Ambient Temperature [°C] | Input Voltage [V] | |
|---|---|---|
| | Load 50% | Load 100% |
| -60 | 15.4 | 15.4 |
| -40 | 15.2 | 15.3 |
| -20 | 15.0 | 15.1 |
| 0 | 14.9 | 15.0 |
| 25 | 14.9 | 14.9 |
| 80 | 14.8 | 15.0 |
| 85 | 14.8 | 15.0 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |

| | |
|---|---|
| Object | -12V0.13A |

1.Graph




Note: Slanted line shows the range of the rated ambient temperature.

2.Values

| Ambient Temperature [°C] | Input Voltage [V] | |
|---|---|---|
| | Load 50% | Load 100% |
| -60 | 15.4 | 15.4 |
| -40 | 15.2 | 15.3 |
| -20 | 15.0 | 15.1 |
| 0 | 14.9 | 15.0 |
| 25 | 14.9 | 14.9 |
| 80 | 14.8 | 15.0 |
| 85 | 14.8 | 15.0 |
| -- | - | - |
| -- | - | - |
| -- | - | - |
| -- | - | - |



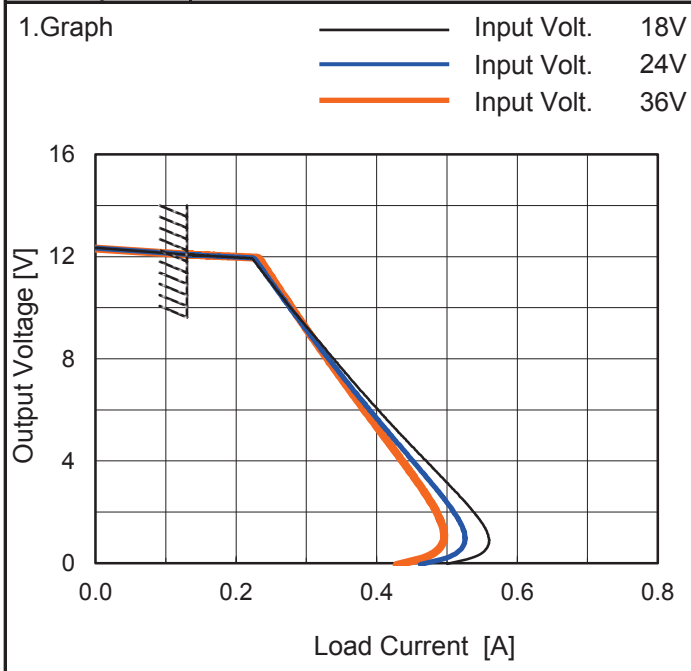
BC-10994

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Overcurrent Protection |
| Object | +12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

1.Graph



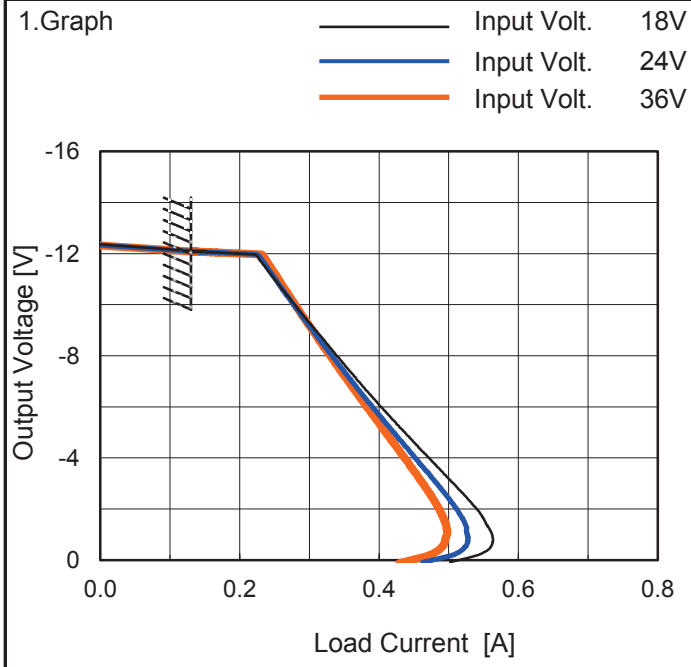

2.Values

| Output Voltage [V] | Load Current [A] Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
|---|---|---|---|
| 11.4 | 0.24 | 0.24 | 0.25 |
| 10.8 | 0.25 | 0.26 | 0.26 |
| 9.6 | 0.29 | 0.29 | 0.29 |
| 8.4 | 0.33 | 0.32 | 0.32 |
| 7.2 | 0.36 | 0.35 | 0.35 |
| 6.0 | 0.40 | 0.39 | 0.38 |
| 4.8 | 0.44 | 0.43 | 0.41 |
| 3.6 | 0.48 | 0.46 | 0.45 |
| 2.4 | 0.53 | 0.50 | 0.48 |
| 1.2 | 0.56 | 0.52 | 0.50 |
| 0.0 | 0.50 | 0.46 | 0.43 |
| -- | - | - | - |

-12V: Rated Load Current

| | |
|---|---|
| Object | -12V0.13A |

1.Graph




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

2.Values

| Output Voltage [V] | Load Current [A] Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
|---|---|---|---|
| -11.4 | 0.24 | 0.24 | 0.25 |
| -10.8 | 0.26 | 0.26 | 0.26 |
| -9.6 | 0.29 | 0.29 | 0.29 |
| -8.4 | 0.33 | 0.32 | 0.32 |
| -7.2 | 0.36 | 0.35 | 0.35 |
| -6.0 | 0.40 | 0.39 | 0.38 |
| -4.8 | 0.44 | 0.43 | 0.42 |
| -3.6 | 0.48 | 0.46 | 0.45 |
| -2.4 | 0.53 | 0.50 | 0.48 |
| -1.2 | 0.56 | 0.53 | 0.50 |
| 0.0 | 0.50 | 0.46 | 0.43 |
| -- | - | - | - |

+12V: Rated Load Current



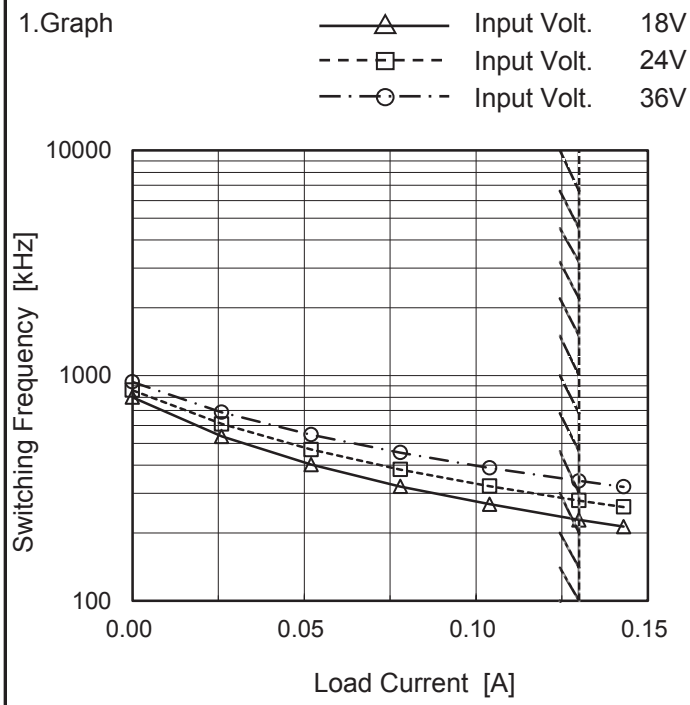
BC-10994

COSEL

| | |
|---|---|
| Model | MGW32412 |
| Item | Switching Frequency (by Load Current) |
| Object | +/-12V0.13A |

Temperature 25°C
Testing Circuitry Figure A

1.Graph




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

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

2.Values

| Load Current [A] | Frequency [kHz] | | |
|---|---|---|---|
| | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| 0.000 | 801 | 861 | 938 |
| 0.026 | 537 | 610 | 687 |
| 0.052 | 402 | 469 | 547 |
| 0.078 | 321 | 383 | 455 |
| 0.104 | 268 | 323 | 389 |
| 0.130 | 228 | 279 | 341 |
| 0.143 | 213 | 261 | 321 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |

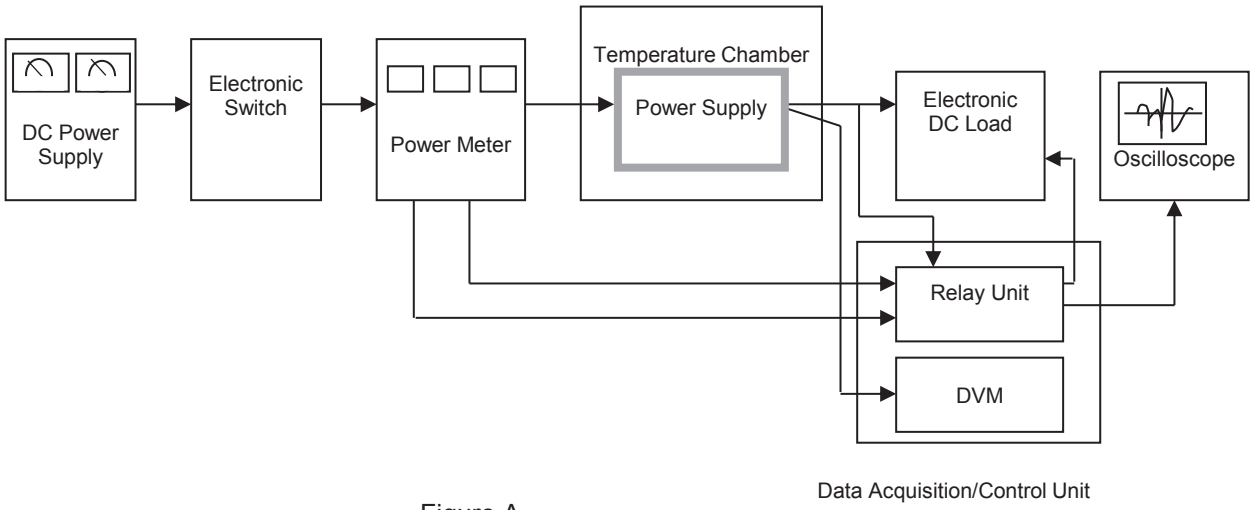



Figure A

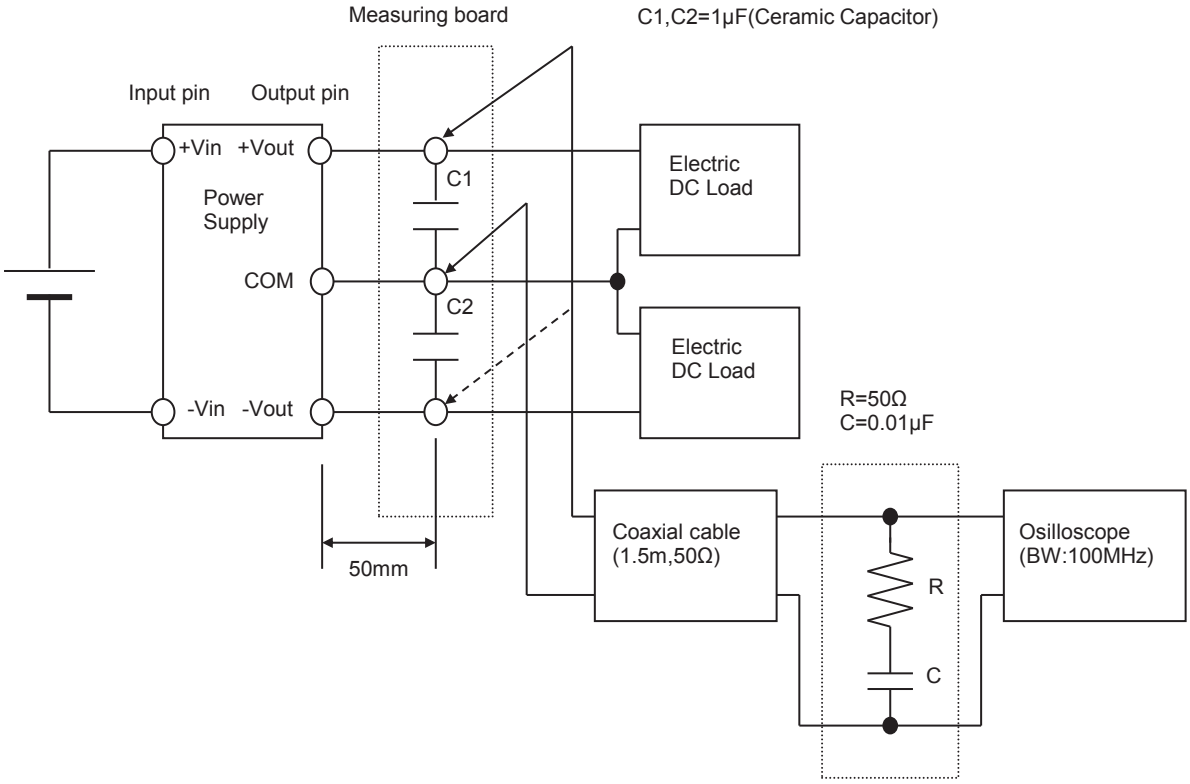



Figure B（Ripple and Ripple noise Characteristic）