

TEST DATA OF STMGFS302415

Regulated DC Power Supply
February 1, 2013

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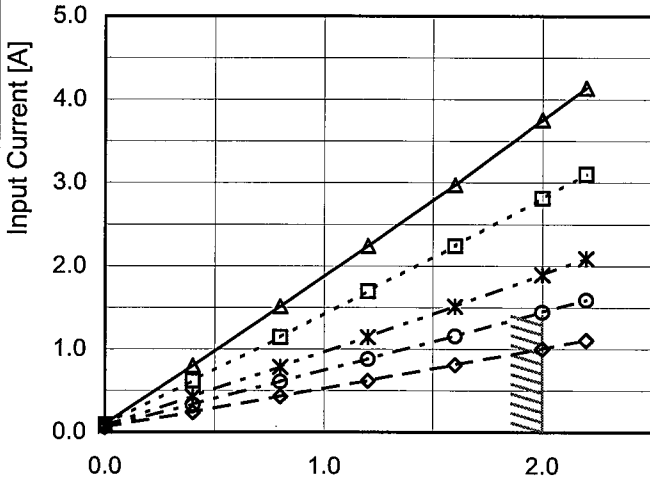
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| Model | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------------------------|---|-----------|-------------------|-------------------|--|--|---------|----------|-----------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| Item | Input Current (by Input Voltage) | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>—△—</div><div>Load 100%</div></div><div><div>---□---</div><div>Load 50%</div></div><div><div>---○---</div><div>Load 0%</div></div></div> <p>Note: Slanted line shows the range of the rated input voltage.</p> | | <table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="3">Input Current [A]</th></tr><tr><th>Load 0%</th><th>Load 50%</th><th>Load 100%</th></tr><tr><td>0.0</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>6.0</td><td>0.002</td><td>0.002</td><td>0.002</td></tr><tr><td>7.0</td><td>0.002</td><td>0.003</td><td>0.003</td></tr><tr><td>8.0</td><td>0.003</td><td>0.001</td><td>0.002</td></tr><tr><td>8.1</td><td>0.002</td><td>0.002</td><td>0.003</td></tr><tr><td>8.2</td><td>0.107</td><td>0.564</td><td>0.931</td></tr><tr><td>8.3</td><td>0.106</td><td>2.008</td><td>2.130</td></tr><tr><td>8.5</td><td>0.104</td><td>1.980</td><td>3.956</td></tr><tr><td>9.0</td><td>0.101</td><td>1.868</td><td>3.755</td></tr><tr><td>12.0</td><td>0.090</td><td>1.407</td><td>2.813</td></tr><tr><td>18.0</td><td>0.075</td><td>0.964</td><td>1.896</td></tr><tr><td>24.0</td><td>0.066</td><td>0.740</td><td>1.445</td></tr><tr><td>36.0</td><td>0.058</td><td>0.521</td><td>1.002</td></tr><tr><td>40.0</td><td>0.057</td><td>0.479</td><td>0.912</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> | | Input Voltage [V] | Input Current [A] | | | Load 0% | Load 50% | Load 100% | 0.0 | 0.000 | 0.000 | 0.000 | 6.0 | 0.002 | 0.002 | 0.002 | 7.0 | 0.002 | 0.003 | 0.003 | 8.0 | 0.003 | 0.001 | 0.002 | 8.1 | 0.002 | 0.002 | 0.003 | 8.2 | 0.107 | 0.564 | 0.931 | 8.3 | 0.106 | 2.008 | 2.130 | 8.5 | 0.104 | 1.980 | 3.956 | 9.0 | 0.101 | 1.868 | 3.755 | 12.0 | 0.090 | 1.407 | 2.813 | 18.0 | 0.075 | 0.964 | 1.896 | 24.0 | 0.066 | 0.740 | 1.445 | 36.0 | 0.058 | 0.521 | 1.002 | 40.0 | 0.057 | 0.479 | 0.912 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Input Voltage [V] | Input Current [A] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 0% | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 0.002 | 0.002 | 0.002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 0.002 | 0.003 | 0.003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 0.003 | 0.001 | 0.002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.1 | 0.002 | 0.002 | 0.003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.2 | 0.107 | 0.564 | 0.931 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.3 | 0.106 | 2.008 | 2.130 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | 0.104 | 1.980 | 3.956 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 | 0.101 | 1.868 | 3.755 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 0.090 | 1.407 | 2.813 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.0 | 0.075 | 0.964 | 1.896 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24.0 | 0.066 | 0.740 | 1.445 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36.0 | 0.058 | 0.521 | 1.002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40.0 | 0.057 | 0.479 | 0.912 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | |
|---|--|--|--|
| Model | | STMGFS302415 | |
| Item | | Input Current (by Load Current) | |
| Object | | | |
| 1.Graph | | <div><div><div>—△—</div>Input Volt. 9V</div><div><div>---□---</div>Input Volt. 12V</div><div><div>-·-·*-·-</div>Input Volt. 18V</div><div><div>-·-·○-·-</div>Input Volt. 24V</div><div><div>--◇--</div>Input Volt. 36V</div></div> <div></div> | |
| Note: Slanted line shows the range of the rated load current. | | | |

| | | | |
|-------------------|--|----------|--|
| Temperature | | 25°C | |
| Testing Circuitry | | Figure A | |

2.Values

| Load Current [A] | Input Current [A] | | | | |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] |
| 0.0 | 0.101 | 0.090 | 0.075 | 0.066 | 0.058 |
| 0.4 | 0.799 | 0.614 | 0.425 | 0.332 | 0.240 |
| 0.8 | 1.513 | 1.142 | 0.783 | 0.607 | 0.431 |
| 1.2 | 2.242 | 1.694 | 1.147 | 0.879 | 0.618 |
| 1.6 | 2.974 | 2.242 | 1.514 | 1.159 | 0.809 |
| 2.0 | 3.755 | 2.813 | 1.896 | 1.445 | 1.002 |
| 2.2 | 4.141 | 3.100 | 2.089 | 1.592 | 1.106 |
| -- | - | - | - | - | - |
| -- | - | - | - | - | - |
| -- | - | - | - | - | - |
| -- | - | - | - | - | - |

- 2 -

BC - 10721

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| Model | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|----------|-------------------|----------------|--|----------|-----------|-----|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Item | Efficiency (by Input Voltage) | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>---</div><div>□---</div><div>Load 50%</div></div><div><div>---</div><div>△---</div><div>Load 100%</div></div></div> <p>Efficiency [%]</p> <p>Input Voltage [V]</p> <p>Note: Slanted line shows the range of the rated input voltage.</p> | | <table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Efficiency [%]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>8.5</td><td>90.0</td><td>89.7</td></tr><tr><td>9.0</td><td>90.0</td><td>89.6</td></tr><tr><td>12.0</td><td>89.1</td><td>89.6</td></tr><tr><td>15.0</td><td>88.1</td><td>89.3</td></tr><tr><td>18.0</td><td>87.1</td><td>88.7</td></tr><tr><td>24.0</td><td>85.0</td><td>87.3</td></tr><tr><td>30.0</td><td>82.7</td><td>85.6</td></tr><tr><td>36.0</td><td>80.4</td><td>83.9</td></tr><tr><td>40.0</td><td>78.8</td><td>82.7</td></tr></table> | | Input Voltage [V] | Efficiency [%] | | Load 50% | Load 100% | 8.5 | 90.0 | 89.7 | 9.0 | 90.0 | 89.6 | 12.0 | 89.1 | 89.6 | 15.0 | 88.1 | 89.3 | 18.0 | 87.1 | 88.7 | 24.0 | 85.0 | 87.3 | 30.0 | 82.7 | 85.6 | 36.0 | 80.4 | 83.9 | 40.0 | 78.8 | 82.7 |
| Input Voltage [V] | Efficiency [%] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | 90.0 | 89.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 | 90.0 | 89.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 89.1 | 89.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.0 | 88.1 | 89.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.0 | 87.1 | 88.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24.0 | 85.0 | 87.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30.0 | 82.7 | 85.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36.0 | 80.4 | 83.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40.0 | 78.8 | 82.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------------------------|---|-------------------|-------------------|-------------------|--|--|--|--|------------------|-------------------|-------------------|-------------------|-------------------|-----|---|---|---|---|---|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|-----|------|------|------|------|------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|
| Item | Efficiency (by Load Current) | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>---□---</div><div>Input Volt.</div><div>12V</div></div><div><div>---*---</div><div>Input Volt.</div><div>18V</div></div><div><div>---○---</div><div>Input Volt.</div><div>24V</div></div><div><div>---◇---</div><div>Input Volt.</div><div>36V</div></div></div> <div><div>Efficiency [%]</div><div><div>100</div><div>90</div><div>80</div><div>70</div><div>60</div><div>50</div></div><div><div>0.0</div><div>1.0</div><div>2.0</div></div><div>Load Current [A]</div></div> <div><p>Note: Slanted line shows the range of the rated load current.</p></div> | | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Efficiency [%]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.0</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0.4</td><td>83.9</td><td>82.3</td><td>79.0</td><td>76.2</td><td>70.3</td></tr><tr><td>0.8</td><td>89.2</td><td>88.1</td><td>85.8</td><td>83.3</td><td>78.1</td></tr><tr><td>1.2</td><td>90.2</td><td>89.6</td><td>87.9</td><td>86.0</td><td>81.8</td></tr><tr><td>1.6</td><td>90.2</td><td>89.9</td><td>88.6</td><td>87.1</td><td>83.4</td></tr><tr><td>2.0</td><td>89.6</td><td>89.6</td><td>88.7</td><td>87.3</td><td>83.9</td></tr><tr><td>2.2</td><td>89.2</td><td>89.3</td><td>88.6</td><td>87.3</td><td>84.1</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> | | Load Current [A] | Efficiency [%] | | | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.0 | - | - | - | - | - | 0.4 | 83.9 | 82.3 | 79.0 | 76.2 | 70.3 | 0.8 | 89.2 | 88.1 | 85.8 | 83.3 | 78.1 | 1.2 | 90.2 | 89.6 | 87.9 | 86.0 | 81.8 | 1.6 | 90.2 | 89.9 | 88.6 | 87.1 | 83.4 | 2.0 | 89.6 | 89.6 | 88.7 | 87.3 | 83.9 | 2.2 | 89.2 | 89.3 | 88.6 | 87.3 | 84.1 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| Load Current [A] | Efficiency [%] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.4 | 83.9 | 82.3 | 79.0 | 76.2 | 70.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.8 | 89.2 | 88.1 | 85.8 | 83.3 | 78.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 90.2 | 89.6 | 87.9 | 86.0 | 81.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.6 | 90.2 | 89.9 | 88.6 | 87.1 | 83.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 89.6 | 89.6 | 88.7 | 87.3 | 83.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | 89.2 | 89.3 | 88.6 | 87.3 | 84.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------------|------------------------------|-----------------------------|------------------------------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|----|--------|--------|---|--|-------------------|--------------------|--|----------|-----------|-----|--------|--------|-----|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|
| Item | Line Regulation | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +15V2A | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>---□---</div><div>Load 50%</div></div><div><div>—△—</div><div>Load 100%</div></div></div> <table><thead><tr><th>Input Voltage [V]</th><th>Output Voltage [V] Load 50%</th><th>Output Voltage [V] Load 100%</th></tr></thead><tbody><tr><td>10</td><td>15.098</td><td>15.100</td></tr><tr><td>12</td><td>15.098</td><td>15.100</td></tr><tr><td>14</td><td>15.098</td><td>15.100</td></tr><tr><td>16</td><td>15.098</td><td>15.100</td></tr><tr><td>18</td><td>15.098</td><td>15.100</td></tr><tr><td>20</td><td>15.098</td><td>15.100</td></tr><tr><td>22</td><td>15.098</td><td>15.100</td></tr><tr><td>24</td><td>15.098</td><td>15.100</td></tr><tr><td>26</td><td>15.098</td><td>15.100</td></tr><tr><td>28</td><td>15.098</td><td>15.100</td></tr><tr><td>30</td><td>15.098</td><td>15.100</td></tr><tr><td>32</td><td>15.098</td><td>15.100</td></tr><tr><td>34</td><td>15.098</td><td>15.100</td></tr><tr><td>36</td><td>15.098</td><td>15.100</td></tr></tbody></table> | | Input Voltage [V] | Output Voltage [V] Load 50% | Output Voltage [V] Load 100% | 10 | 15.098 | 15.100 | 12 | 15.098 | 15.100 | 14 | 15.098 | 15.100 | 16 | 15.098 | 15.100 | 18 | 15.098 | 15.100 | 20 | 15.098 | 15.100 | 22 | 15.098 | 15.100 | 24 | 15.098 | 15.100 | 26 | 15.098 | 15.100 | 28 | 15.098 | 15.100 | 30 | 15.098 | 15.100 | 32 | 15.098 | 15.100 | 34 | 15.098 | 15.100 | 36 | 15.098 | 15.100 | <table><thead><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr></thead><tbody><tr><td>8.5</td><td>15.098</td><td>15.100</td></tr><tr><td>9.0</td><td>15.098</td><td>15.100</td></tr><tr><td>12.0</td><td>15.098</td><td>15.100</td></tr><tr><td>15.0</td><td>15.098</td><td>15.100</td></tr><tr><td>18.0</td><td>15.099</td><td>15.101</td></tr><tr><td>24.0</td><td>15.099</td><td>15.101</td></tr><tr><td>30.0</td><td>15.099</td><td>15.101</td></tr><tr><td>36.0</td><td>15.099</td><td>15.101</td></tr><tr><td>40.0</td><td>15.099</td><td>15.101</td></tr></tbody></table> | | Input Voltage [V] | Output Voltage [V] | | Load 50% | Load 100% | 8.5 | 15.098 | 15.100 | 9.0 | 15.098 | 15.100 | 12.0 | 15.098 | 15.100 | 15.0 | 15.098 | 15.100 | 18.0 | 15.099 | 15.101 | 24.0 | 15.099 | 15.101 | 30.0 | 15.099 | 15.101 | 36.0 | 15.099 | 15.101 | 40.0 | 15.099 | 15.101 |
| Input Voltage [V] | Output Voltage [V] Load 50% | Output Voltage [V] Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input Voltage [V] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.5 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15.0 | 15.098 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18.0 | 15.099 | 15.101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24.0 | 15.099 | 15.101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30.0 | 15.099 | 15.101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 36.0 | 15.099 | 15.101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40.0 | 15.099 | 15.101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated input voltage. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| Model | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------------|----------------------|--|----------------------|----------------------|------------------------|--------------------|--|--|--|--|---------------------|----------------------|----------------------|----------------------|----------------------|-----|--------|--------|--------|--------|--------|-----|--------|--------|--------|--------|--------|-----|--------|--------|--------|--------|--------|-----|--------|--------|--------|--------|--------|-----|--------|--------|--------|--------|--------|-----|--------|--------|--------|--------|--------|-----|--------|--------|--------|--------|--------|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|----|---|---|---|---|---|
| Item | Load Regulation | | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +15V2A | | Testing Circuitry | Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>—△—</div><div>Input Volt.</div><div>9V</div></div><div><div>---□---</div><div>Input Volt.</div><div>12V</div></div><div><div>---*---</div><div>Input Volt.</div><div>18V</div></div><div><div>---○---</div><div>Input Volt.</div><div>24V</div></div><div><div>---◇---</div><div>Input Volt.</div><div>36V</div></div></div> <div><div>Output Voltage [V]</div><div>Load Current [A]</div></div> | | | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="5">Output Voltage [V]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th><th>Input Volt. 24[V]</th><th>Input Volt. 36[V]</th></tr><tr><td>0.0</td><td>15.108</td><td>15.108</td><td>15.108</td><td>15.108</td><td>15.108</td></tr><tr><td>0.4</td><td>15.107</td><td>15.107</td><td>15.107</td><td>15.106</td><td>15.106</td></tr><tr><td>0.8</td><td>15.106</td><td>15.106</td><td>15.105</td><td>15.105</td><td>15.105</td></tr><tr><td>1.2</td><td>15.105</td><td>15.104</td><td>15.104</td><td>15.104</td><td>15.104</td></tr><tr><td>1.6</td><td>15.104</td><td>15.103</td><td>15.103</td><td>15.103</td><td>15.103</td></tr><tr><td>2.0</td><td>15.100</td><td>15.100</td><td>15.101</td><td>15.101</td><td>15.101</td></tr><tr><td>2.2</td><td>15.099</td><td>15.099</td><td>15.100</td><td>15.100</td><td>15.100</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> | | | Load Current [A] | Output Voltage [V] | | | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | 0.0 | 15.108 | 15.108 | 15.108 | 15.108 | 15.108 | 0.4 | 15.107 | 15.107 | 15.107 | 15.106 | 15.106 | 0.8 | 15.106 | 15.106 | 15.105 | 15.105 | 15.105 | 1.2 | 15.105 | 15.104 | 15.104 | 15.104 | 15.104 | 1.6 | 15.104 | 15.103 | 15.103 | 15.103 | 15.103 | 2.0 | 15.100 | 15.100 | 15.101 | 15.101 | 15.101 | 2.2 | 15.099 | 15.099 | 15.100 | 15.100 | 15.100 | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - | -- | - | - | - | - | - |
| Load Current [A] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | Input Volt. 24[V] | Input Volt. 36[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 15.108 | 15.108 | 15.108 | 15.108 | 15.108 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.4 | 15.107 | 15.107 | 15.107 | 15.106 | 15.106 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.8 | 15.106 | 15.106 | 15.105 | 15.105 | 15.105 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 15.105 | 15.104 | 15.104 | 15.104 | 15.104 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.6 | 15.104 | 15.103 | 15.103 | 15.103 | 15.103 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 15.100 | 15.100 | 15.101 | 15.101 | 15.101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | 15.099 | 15.099 | 15.100 | 15.100 | 15.100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated load current. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

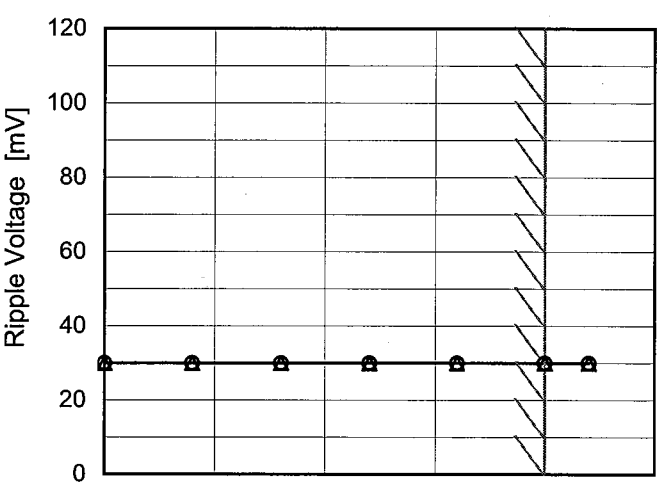
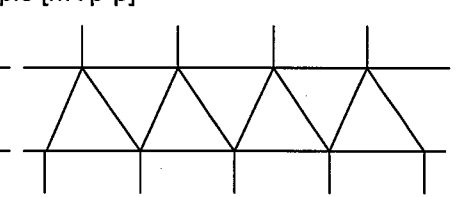
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| Model | | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------------|--|--|------------------|---------------------|--|-------------------|--------------------|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | | Ripple Voltage (by Load Current) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +15V2A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div><div><div></div><div>Input Volt.</div><div>9V</div></div><div><div></div><div>Input Volt.</div><div>36V</div></div></div><div></div></div></div> | | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple Voltage [mV]</th></tr><tr><th>Input Volt. 9 [V]</th><th>Input Volt. 36 [V]</th></tr><tr><td>0.0</td><td>30</td><td>30</td></tr><tr><td>0.4</td><td>30</td><td>30</td></tr><tr><td>0.8</td><td>30</td><td>30</td></tr><tr><td>1.2</td><td>30</td><td>30</td></tr><tr><td>1.6</td><td>30</td><td>30</td></tr><tr><td>2.0</td><td>30</td><td>30</td></tr><tr><td>2.2</td><td>30</td><td>30</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> | | Load Current [A] | Ripple Voltage [mV] | | Input Volt. 9 [V] | Input Volt. 36 [V] | 0.0 | 30 | 30 | 0.4 | 30 | 30 | 0.8 | 30 | 30 | 1.2 | 30 | 30 | 1.6 | 30 | 30 | 2.0 | 30 | 30 | 2.2 | 30 | 30 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A] | Ripple Voltage [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9 [V] | Input Volt. 36 [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.4 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.8 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.6 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>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.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div><div></div><div>Ripple [mVp-p]</div></div><div></div></div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fig.Complex Ripple Wave Form | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------|--|--|------------------|-------------------|--|-------------------|--------------------|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|-----|----|----|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | | Ripple-Noise | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +15V2A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div><div><div></div><div>Input Volt.</div><div>9V</div></div><div><div></div><div>Input Volt.</div><div>36V</div></div></div></div></div> | | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="2">Ripple-Noise [mV]</th></tr><tr><th>Input Volt. 9 [V]</th><th>Input Volt. 36 [V]</th></tr><tr><td>0.0</td><td>35</td><td>40</td></tr><tr><td>0.4</td><td>35</td><td>40</td></tr><tr><td>0.8</td><td>35</td><td>40</td></tr><tr><td>1.2</td><td>35</td><td>40</td></tr><tr><td>1.6</td><td>35</td><td>40</td></tr><tr><td>2.0</td><td>35</td><td>45</td></tr><tr><td>2.2</td><td>35</td><td>45</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> | | Load Current [A] | Ripple-Noise [mV] | | Input Volt. 9 [V] | Input Volt. 36 [V] | 0.0 | 35 | 40 | 0.4 | 35 | 40 | 0.8 | 35 | 40 | 1.2 | 35 | 40 | 1.6 | 35 | 40 | 2.0 | 35 | 45 | 2.2 | 35 | 45 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A] | Ripple-Noise [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9 [V] | Input Volt. 36 [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 35 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.4 | 35 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.8 | 35 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 35 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.6 | 35 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 35 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | 35 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Measured by 100 MHz Oscilloscope.</p> <p>Ripple-Noise is shown as p-p in the figure below.</p> <p>Note: Slanted line shows the range of the rated load current.</p> <div><div><div><div></div><div>Ripple Noise[mVp-p]</div></div></div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fig.Complex Ripple Noise Wave Form | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Model | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------------------------|---|--------------------------------|------------------------|--|----------|-----------|-----|----|----|-----|----|----|---|----|----|----|----|----|----|----|----|----|----|----|----|---|---|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | Ripple Voltage (by Ambient Temp.) | Testing Circuitry Figure B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +15V2A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>1.Graph</p> <div style="text-align: right;"> ---□--- Load 50% —△— Load 100% </div> <p style="text-align: center;">Ambient Temperature [°C]</p> <p style="text-align: center;">Input Volt. 24V</p> <p>Measured by 100 MHz Oscilloscope. Note: Slanted line shows the range of the rated ambient temperature.</p> <div style="margin-top: 20px;"> <p style="text-align: center;">Fig.Complex Ripple Noise Wave Form</p> </div> | | <p>2.Values</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Ambient Temperature [°C]</th><th colspan="2">Ripple Voltage [mV]</th></tr> <tr> <th>Load 50%</th><th>Load 100%</th></tr> </thead> <tbody> <tr><td>-40</td><td>70</td><td>70</td></tr> <tr><td>-20</td><td>60</td><td>60</td></tr> <tr><td>0</td><td>40</td><td>40</td></tr> <tr><td>25</td><td>30</td><td>30</td></tr> <tr><td>60</td><td>30</td><td>30</td></tr> <tr><td>65</td><td>30</td><td>30</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> <tr><td>--</td><td>-</td><td>-</td></tr> </tbody> </table> | Ambient Temperature [°C] | Ripple Voltage [mV] | | Load 50% | Load 100% | -40 | 70 | 70 | -20 | 60 | 60 | 0 | 40 | 40 | 25 | 30 | 30 | 60 | 30 | 30 | 65 | 30 | 30 | -- | - | - | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Ambient Temperature [°C] | Ripple Voltage [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -40 | 70 | 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 60 | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 40 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 65 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|--------|--|---------------------------|--|
| Model | | STMGFS302415 | |
| Item | | Ambient Temperature Drift | |
| Object | | +15V2A | |

1.Graph

—△—

Input Volt.

9V

---□---

Input Volt.

12V

---*---

Input Volt.

18V

---○---

Input Volt.

24V

---◇---

Input Volt.

36V

Output Voltage [V]



| | | |
|--------|-------------------------|----------------------------|
| | | Testing Circuitry Figure A |
| Model | STMGFS302415 | |
| Item | Output Voltage Accuracy | |
| Object | +15V2A | |

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 : -20 - 60°C

Input Voltage : 9 - 36V

Load Current : 0 - 2A

* Output Voltage Accuracy = $\pm(\text{Maximum of Output Voltage} - \text{Minimum of Output Voltage}) / 2$

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

2. Values

| Item | Temperature [°C] | Input Voltage[V] | Output | | Output Voltage Accuracy | |
|-----------------|---------------------|---------------------|------------|------------|-------------------------|------------|
| | | | Current[A] | Voltage[V] | Value [mV] | Ration [%] |
| Maximum Voltage | 60 | 18 | 0 | 15.126 | ±36 | ±0.2 |
| Minimum Voltage | -20 | 9 | 2 | 15.055 | | |

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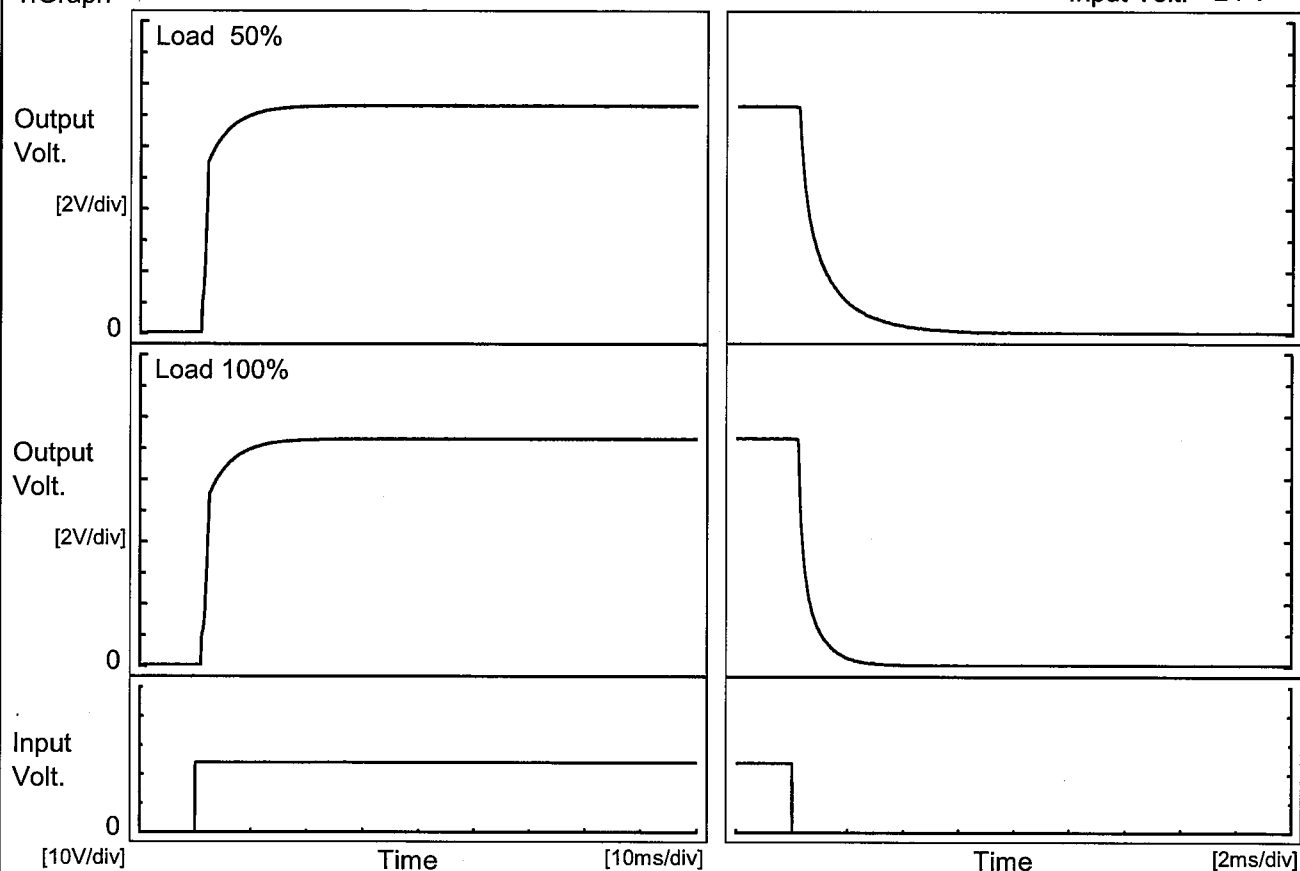
| Model | | STMGFS302415 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------|----------------------------|--------------------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|--|--|------------------|--|--|--|----------------------------|--|
| Item | | Time Lapse Drift | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +15V2A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div><div>15.40</div><div>15.30</div><div>15.20</div><div>15.10</div><div>15.00</div><div>14.90</div><div>14.80</div><div>14.70</div></div><div><div>0</div><div>2</div><div>4</div><div>6</div><div>8</div><div>10</div></div><div><div>Output Voltage [V]</div><div>Time [H]</div></div></div><div><div>Input Volt.</div><div>24V</div></div><div><div>Load</div><div>100%</div></div></div> <div><table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>15.093</td></tr><tr><td>0.5</td><td>15.113</td></tr><tr><td>1.0</td><td>15.114</td></tr><tr><td>2.0</td><td>15.114</td></tr><tr><td>3.0</td><td>15.113</td></tr><tr><td>4.0</td><td>15.113</td></tr><tr><td>5.0</td><td>15.113</td></tr><tr><td>6.0</td><td>15.113</td></tr><tr><td>7.0</td><td>15.113</td></tr><tr><td>8.0</td><td>15.113</td></tr></table></div> <tr><td colspan="2"></td><td colspan="2">Temperature 25°C</td></tr> <tr><td colspan="2"></td><td colspan="2">Testing Circuitry Figure A</td></tr> | | Time since start [H] | Output Voltage [V] | 0.0 | 15.093 | 0.5 | 15.113 | 1.0 | 15.114 | 2.0 | 15.114 | 3.0 | 15.113 | 4.0 | 15.113 | 5.0 | 15.113 | 6.0 | 15.113 | 7.0 | 15.113 | 8.0 | 15.113 | | | Temperature 25°C | | | | Testing Circuitry Figure A | |
| Time since start [H] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 15.093 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 | 15.113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 15.114 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 15.114 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 15.113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | 15.113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.0 | 15.113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 15.113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 15.113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 15.113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Temperature 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|--------|--------------------|-------------------|----------|
| Model | STMGFS302415 | Temperature | 25°C |
| Item | Rise and Fall Time | Testing Circuitry | Figure A |
| Object | +15V2A | | |

1. Graph

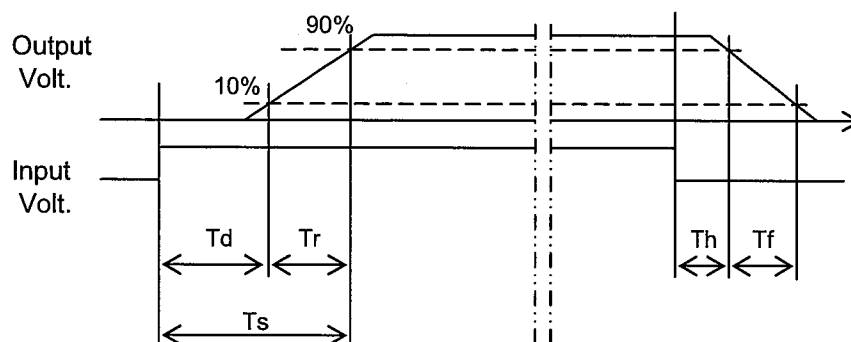
Input Volt. 24 V



2. Values

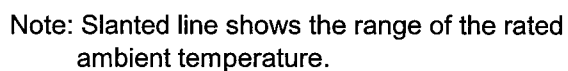
[ms]

| Load \ Time | Td | Tr | Ts | Th | Tf |
|-------------|-----|-----|-----|-----|-----|
| 50 % | 1.2 | 6.5 | 7.7 | 0.2 | 2.1 |
| 100 % | 1.2 | 6.8 | 8.0 | 0.2 | 1.0 |



Testing Circuitry Figure A

2.Values



| Ambient Temperature [°C] | Input Voltage [V] | |
|-----------------------------|----------------------|-----------|
| | Load 50% | Load 100% |
| -40 | 8.0 | 8.0 |
| -20 | 8.0 | 8.1 |
| 0 | 8.0 | 8.1 |
| 10 | 8.1 | 8.2 |
| 25 | 8.1 | 8.2 |
| 30 | 8.1 | 8.2 |
| 40 | 8.1 | 8.2 |
| 50 | 8.1 | 8.1 |
| 60 | 8.0 | 8.1 |
| 65 | 8.0 | 8.1 |
| -- | - | - |

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| | | | |
|---|------------------------|-------------------|-------------------------------|
| | | | |
| Model | STMGFS302415 | | |
| Item | Overvoltage Protection | | Testing Circuitry Figure A |
| Object | +15V2A | | |
| 1.Graph | | | |
| <div><div><div>—△—</div><div>Input Volt. 24V</div></div><div><div>---□---</div><div>Input Volt. 36V</div></div></div> <p>Operating Point [V]</p> <p>Ambient Temperature [°C]</p> <p>Load 0%</p> <p>Note: Slanted line shows the range of the rated ambient temperature.</p> | | | |
| 2.Values | | | |
| Ambient Temperature [°C] | Operating Point [V] | | |
| | Input Volt. 24[V] | Input Volt. 36[V] | |
| -40 | 20.72 | 20.77 | |
| -20 | 21.03 | 21.01 | |
| 0 | 21.20 | 21.29 | |
| 25 | 21.25 | 21.67 | |
| 60 | 21.73 | 22.19 | |
| 65 | 21.87 | 22.27 | |
| -- | - | - | |
| -- | - | - | |
| -- | - | - | |
| -- | - | - | |
| -- | - | - | |

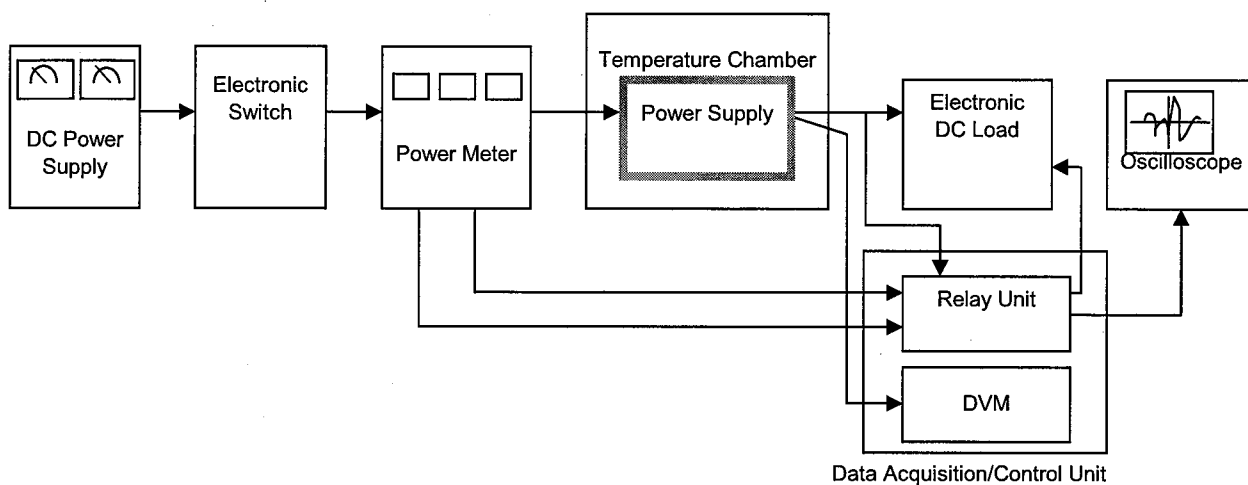


Figure A

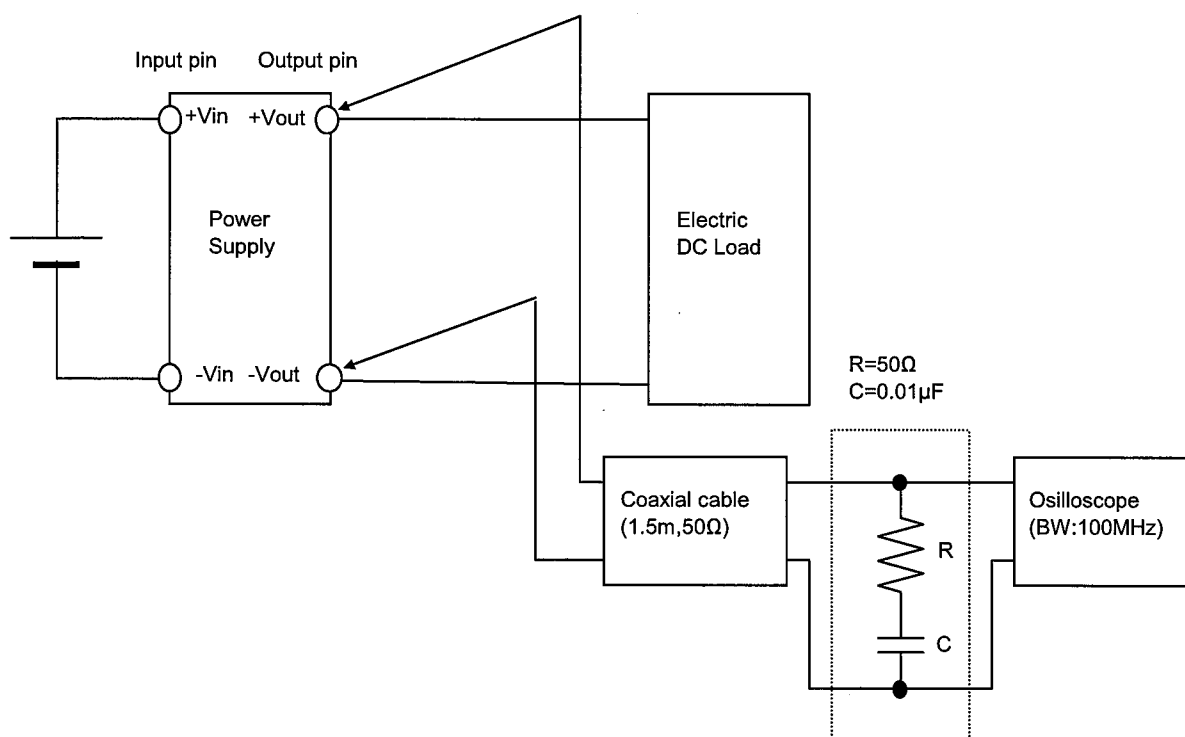


Figure B (Ripple and Ripple noise Characteristic)