

TEST DATA OF SUW61212 SUCW61212

Regulated DC Power Supply
Feb 24, 2005

Approved by : Tetsuo Sugimori
Tetsuo Sugimori Design Manager

Prepared by : Yoshikazu Mizuno
Yoshikazu Mizuno Design Engineer

COSEL CO.,LTD.

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(Final Page 22)

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Model

SUW61212/SUCW61212

Item

Input Current (by Input Voltage)

Object

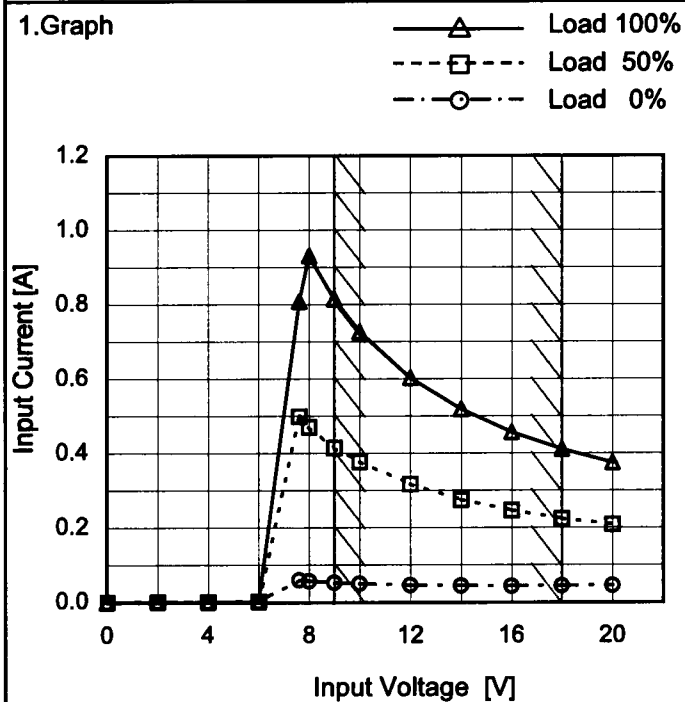
Temperature

25°C

Testing Circuitry

Figure A

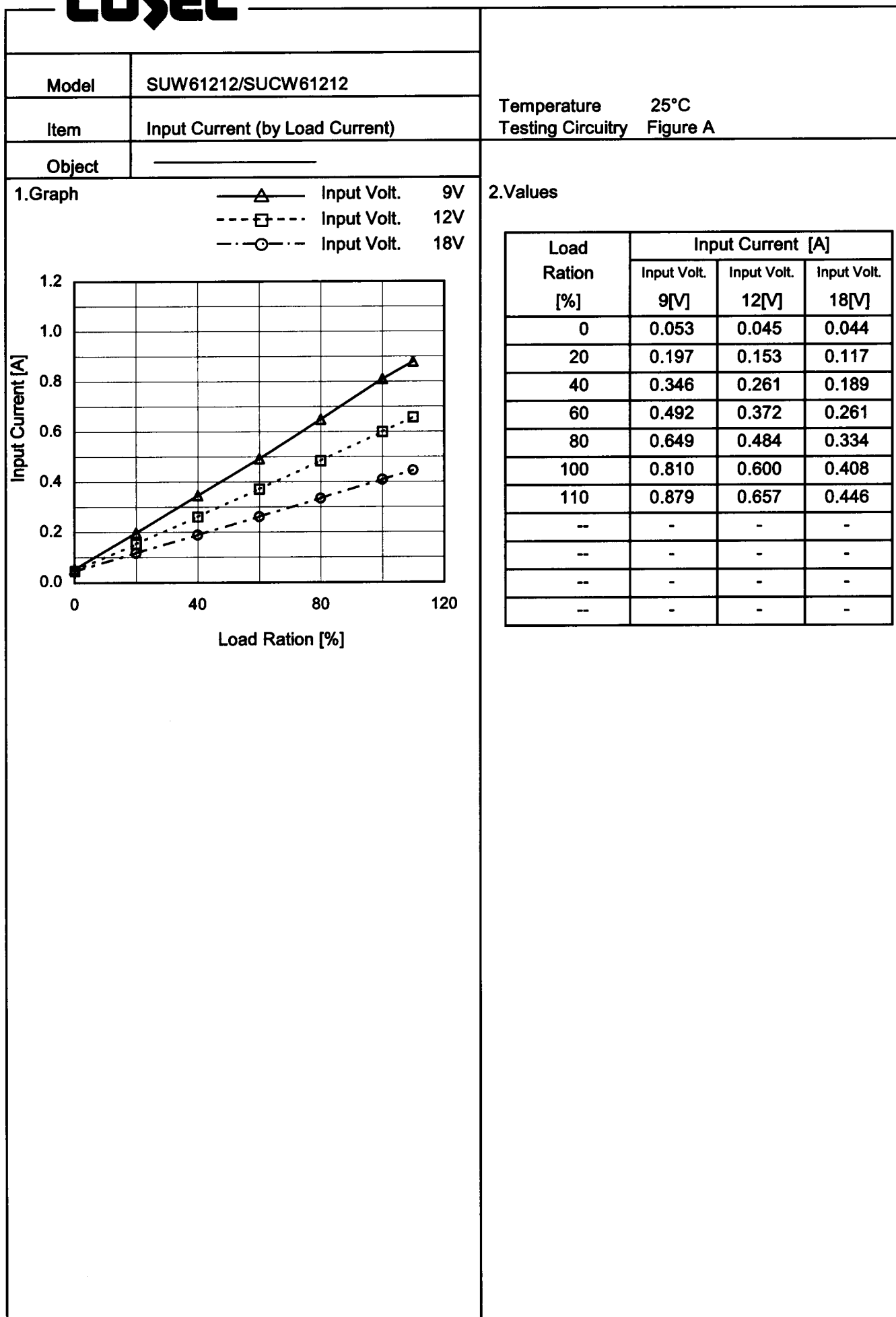
1.Graph



2.Values

| Input Voltage [V] | Input Current [A] | | |
|-------------------|-------------------|----------|-----------|
| | Load 0% | Load 50% | Load 100% |
| 0.0 | 0.000 | 0.000 | 0.000 |
| 2.0 | 0.001 | 0.001 | 0.001 |
| 4.0 | 0.001 | 0.001 | 0.001 |
| 6.0 | 0.002 | 0.002 | 0.002 |
| 7.6 | 0.059 | 0.499 | 0.808 |
| 8.0 | 0.057 | 0.471 | 0.931 |
| 9.0 | 0.053 | 0.415 | 0.815 |
| 10.0 | 0.050 | 0.378 | 0.727 |
| 12.0 | 0.046 | 0.317 | 0.603 |
| 14.0 | 0.044 | 0.275 | 0.519 |
| 16.0 | 0.043 | 0.247 | 0.457 |
| 18.0 | 0.044 | 0.224 | 0.411 |
| 20.0 | 0.045 | 0.208 | 0.375 |
| -- | - | - | - |
| -- | - | - | - |
| -- | - | - | - |

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BC-3704

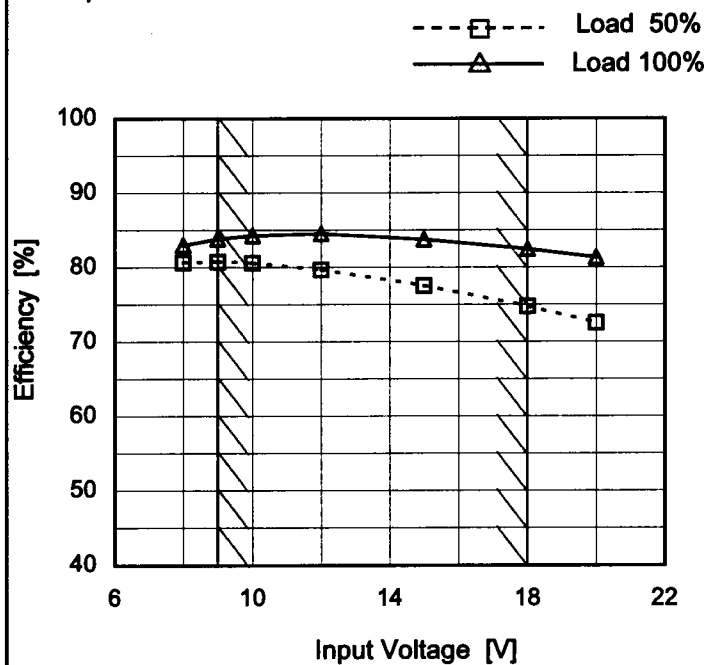
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Model SUW61212/SUCW61212

Item Efficiency (by Input Voltage)

Object
Temperature 25°C
Testing Circuitry Figure A

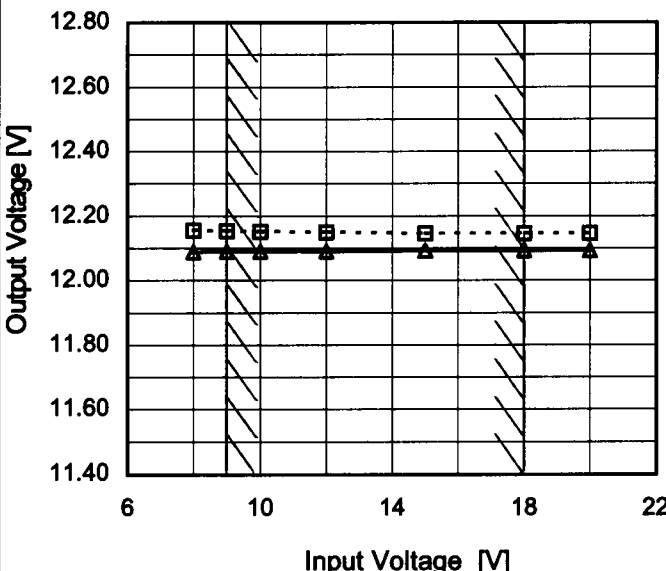
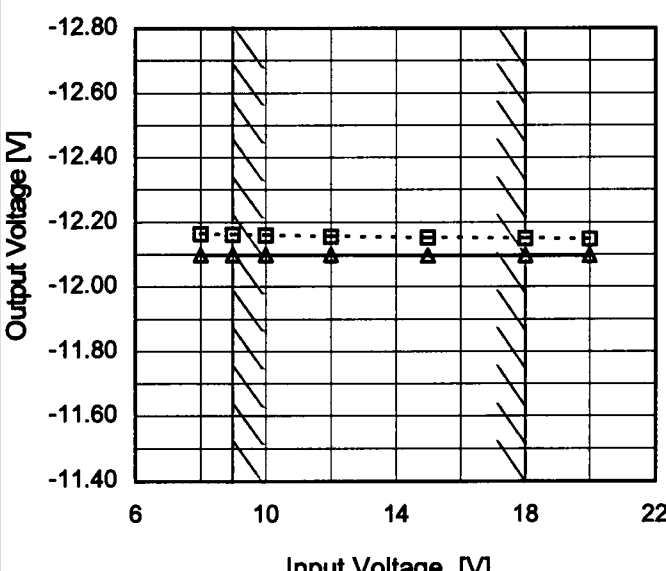
1. Graph



2. Values

| Input Voltage [V] | Efficiency [%] | |
|-------------------|----------------|-----------|
| | Load 50% | Load 100% |
| 8 | 80.6 | 83.0 |
| 9 | 80.8 | 83.8 |
| 10 | 80.6 | 84.3 |
| 12 | 79.7 | 84.5 |
| 15 | 77.6 | 83.8 |
| 18 | 74.8 | 82.5 |
| 20 | 72.5 | 81.3 |
| -- | - | - |
| -- | - | - |

BC-3704

| Model | SUW61212/SUCW61212 | Temperature 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|---|--|-------------------|--------------------|--|----------|-----------|---|---------|---------|---|---------|---------|----|---------|---------|----|---------|---------|----|---------|---------|----|---------|---------|----|---------|---------|----|---|---|----|---|---|
| Item | Line Regulation | Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>---□--- Load 50%</div><div>—△— Load 100%</div></div> | | <table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>8</td><td>12.155</td><td>12.089</td></tr><tr><td>9</td><td>12.153</td><td>12.090</td></tr><tr><td>10</td><td>12.152</td><td>12.090</td></tr><tr><td>12</td><td>12.149</td><td>12.091</td></tr><tr><td>15</td><td>12.147</td><td>12.091</td></tr><tr><td>18</td><td>12.145</td><td>12.091</td></tr><tr><td>20</td><td>12.145</td><td>12.092</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> | | Input Voltage [V] | Output Voltage [V] | | Load 50% | Load 100% | 8 | 12.155 | 12.089 | 9 | 12.153 | 12.090 | 10 | 12.152 | 12.090 | 12 | 12.149 | 12.091 | 15 | 12.147 | 12.091 | 18 | 12.145 | 12.091 | 20 | 12.145 | 12.092 | -- | - | - | -- | - | - |
| Input Voltage [V] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 12.155 | 12.089 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 12.153 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 12.152 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 12.149 | 12.091 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 12.147 | 12.091 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | 12.145 | 12.091 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 12.145 | 12.092 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>---□--- Load 50%</div><div>—△— Load 100%</div></div> | | <table><tr><th rowspan="2">Input Voltage [V]</th><th colspan="2">Output Voltage [V]</th></tr><tr><th>Load 50%</th><th>Load 100%</th></tr><tr><td>8</td><td>-12.164</td><td>-12.098</td></tr><tr><td>9</td><td>-12.161</td><td>-12.098</td></tr><tr><td>10</td><td>-12.159</td><td>-12.098</td></tr><tr><td>12</td><td>-12.155</td><td>-12.098</td></tr><tr><td>15</td><td>-12.152</td><td>-12.096</td></tr><tr><td>18</td><td>-12.149</td><td>-12.096</td></tr><tr><td>20</td><td>-12.148</td><td>-12.096</td></tr><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table> | | Input Voltage [V] | Output Voltage [V] | | Load 50% | Load 100% | 8 | -12.164 | -12.098 | 9 | -12.161 | -12.098 | 10 | -12.159 | -12.098 | 12 | -12.155 | -12.098 | 15 | -12.152 | -12.096 | 18 | -12.149 | -12.096 | 20 | -12.148 | -12.096 | -- | - | - | -- | - | - |
| Input Voltage [V] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | -12.164 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | -12.161 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | -12.159 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | -12.155 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | -12.152 | -12.096 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | -12.149 | -12.096 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | -12.148 | -12.096 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated input voltage. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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BC-3704

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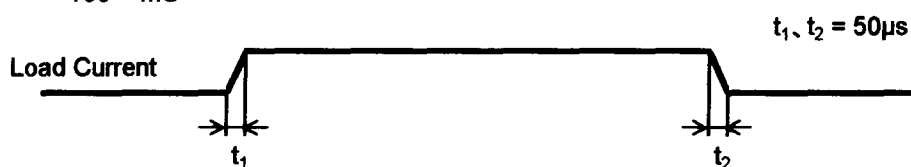
| Model | | SUW61212/SUCW61212 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|--------------------|--|-------------------|------------------|--------------------|--|--|------------------|-------------------|-------------------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| Item | | Load Regulation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | <div><div><div><div></div></div><div></div></div><div>Input Volt. 9V</div><div><div><div></div></div><div></div></div><div>Input Volt. 12V</div><div><div><div></div></div><div></div></div><div>Input Volt. 18V</div></div> <div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th></tr><tr><td>0.000</td><td>12.361</td><td>12.350</td><td>12.326</td></tr><tr><td>0.050</td><td>12.212</td><td>12.208</td><td>12.203</td></tr><tr><td>0.100</td><td>12.168</td><td>12.164</td><td>12.160</td></tr><tr><td>0.150</td><td>12.138</td><td>12.135</td><td>12.132</td></tr><tr><td>0.200</td><td>12.113</td><td>12.112</td><td>12.110</td></tr><tr><td>0.250</td><td>12.089</td><td>12.090</td><td>12.091</td></tr><tr><td>0.275</td><td>12.078</td><td>12.080</td><td>12.082</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 Current [A] | Output Voltage [V] | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | 0.000 | 12.361 | 12.350 | 12.326 | 0.050 | 12.212 | 12.208 | 12.203 | 0.100 | 12.168 | 12.164 | 12.160 | 0.150 | 12.138 | 12.135 | 12.132 | 0.200 | 12.113 | 12.112 | 12.110 | 0.250 | 12.089 | 12.090 | 12.091 | 0.275 | 12.078 | 12.080 | 12.082 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Load Current [A] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.000 | 12.361 | 12.350 | 12.326 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.050 | 12.212 | 12.208 | 12.203 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.100 | 12.168 | 12.164 | 12.160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.150 | 12.138 | 12.135 | 12.132 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.200 | 12.113 | 12.112 | 12.110 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.250 | 12.089 | 12.090 | 12.091 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.275 | 12.078 | 12.080 | 12.082 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Object | | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|---|-------------------|------------------|--------------------|--|--|------------------|-------------------|-------------------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|-------|---------|---------|---------|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| 1.Graph | | <div><div><div><div></div></div><div></div></div><div>Input Volt. 9V</div><div><div><div></div></div><div></div></div><div>Input Volt. 12V</div><div><div><div></div></div><div></div></div><div>Input Volt. 18V</div></div> <div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th></tr><tr><td>0.000</td><td>-12.378</td><td>-12.364</td><td>-12.341</td></tr><tr><td>0.050</td><td>-12.220</td><td>-12.215</td><td>-12.212</td></tr><tr><td>0.100</td><td>-12.175</td><td>-12.169</td><td>-12.163</td></tr><tr><td>0.150</td><td>-12.145</td><td>-12.141</td><td>-12.136</td></tr><tr><td>0.200</td><td>-12.121</td><td>-12.118</td><td>-12.114</td></tr><tr><td>0.250</td><td>-12.098</td><td>-12.097</td><td>-12.095</td></tr><tr><td>0.275</td><td>-12.086</td><td>-12.087</td><td>-12.086</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 Current [A] | Output Voltage [V] | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | 0.000 | -12.378 | -12.364 | -12.341 | 0.050 | -12.220 | -12.215 | -12.212 | 0.100 | -12.175 | -12.169 | -12.163 | 0.150 | -12.145 | -12.141 | -12.136 | 0.200 | -12.121 | -12.118 | -12.114 | 0.250 | -12.098 | -12.097 | -12.095 | 0.275 | -12.086 | -12.087 | -12.086 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Load Current [A] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.000 | -12.378 | -12.364 | -12.341 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.050 | -12.220 | -12.215 | -12.212 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.100 | -12.175 | -12.169 | -12.163 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.150 | -12.145 | -12.141 | -12.136 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.200 | -12.121 | -12.118 | -12.114 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.250 | -12.098 | -12.097 | -12.095 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.275 | -12.086 | -12.087 | -12.086 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated load current. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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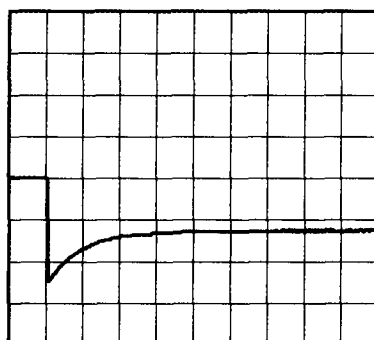
| | | | |
|--------|-----------------------|-------------------|----------|
| Model | SUW61212/SUCW61212 | Temperature | 25°C |
| Item | Dynamic Load Response | Testing Circuitry | Figure A |
| Object | +12V0.25A | | |

Input Volt. 12 V
Cycle 100 mS

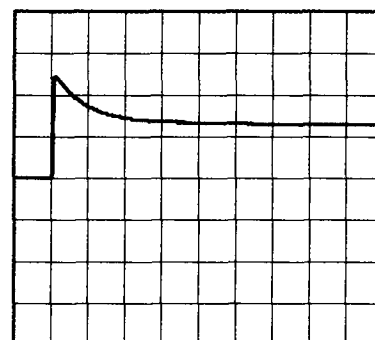


Min. Load (0A) \longleftrightarrow
Load 100% (0.25A)

200mV/div



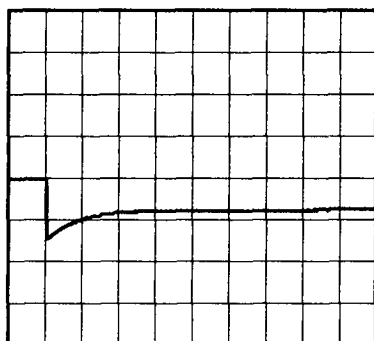
2ms/div



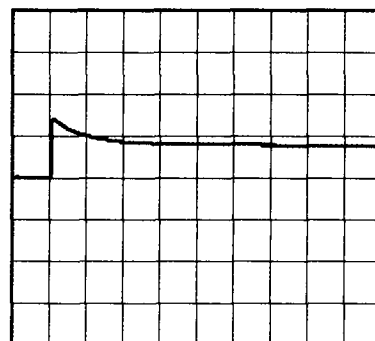
2ms/div

Min. Load (0A) \longleftrightarrow
Load 50% (0.125A)

200mV/div



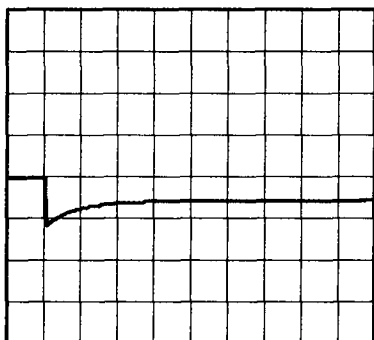
2ms/div



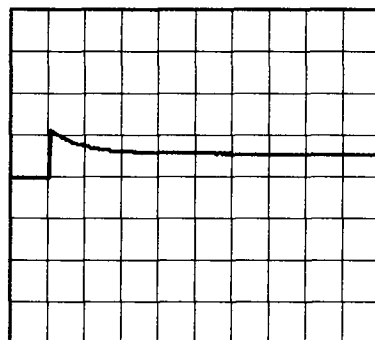
2ms/div

Load 50% (0.125A) \longleftrightarrow
Load 100% (0.25A)

200mV/div



2ms/div

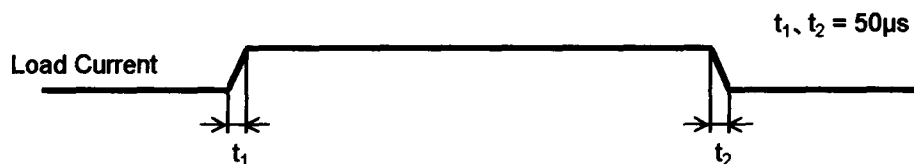


2ms/div

COSEL

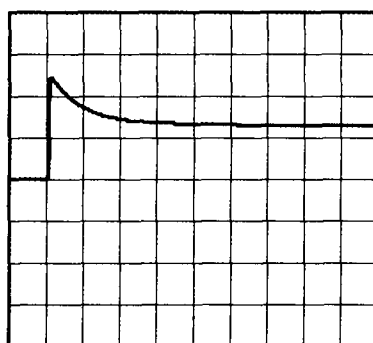
| | | | |
|--------|-----------------------|-------------------|----------|
| Model | SUW61212/SUCW61212 | Temperature | 25°C |
| Item | Dynamic Load Response | Testing Circuitry | Figure A |
| Object | -12V0.25A | | |

Input Volt. 12 V
Cycle 100 mS

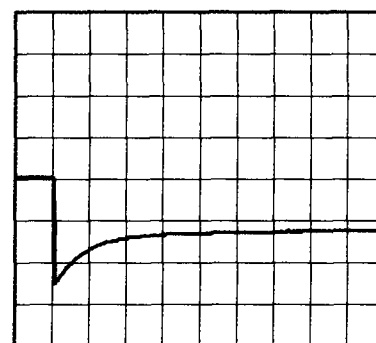


Min. Load (0A) \longleftrightarrow
Load 100% (0.25A)

200mV/div



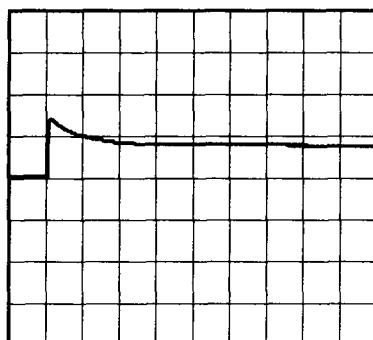
2ms/div



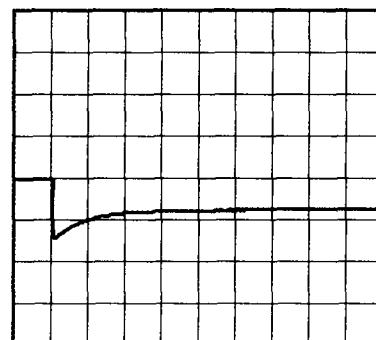
2ms/div

Min. Load (0A) \longleftrightarrow
Load 50% (0.125A)

200mV/div



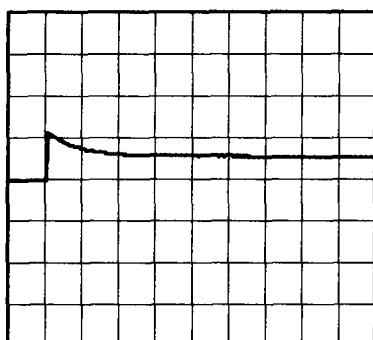
2ms/div



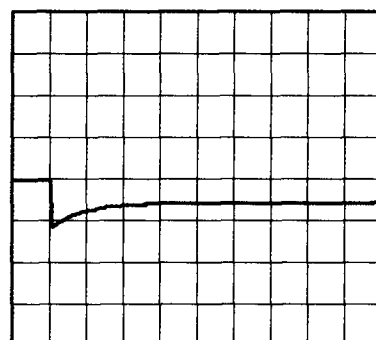
2ms/div

Load 50% (0.125A) \longleftrightarrow
Load 100% (0.25A)

200mV/div



2ms/div



2ms/div

COSEL

| Model | SUW61212/SUCW61212 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------------------|--|----------|------------------|---------------------|--|-------------------|--------------------|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | Ripple Voltage (by Load Current) | Temperature | 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +12V0.25A | Testing Circuitry | Figure B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>—△— Input Volt. 9V</div><div>- -○- - Input Volt. 18V</div></div><p>Ripple Voltage [mV]</p><p>Load Current [A]</p></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. 18 [V]</th></tr><tr><td>0.000</td><td>2</td><td>2</td></tr><tr><td>0.050</td><td>2</td><td>3</td></tr><tr><td>0.100</td><td>3</td><td>3</td></tr><tr><td>0.150</td><td>4</td><td>3</td></tr><tr><td>0.200</td><td>5</td><td>4</td></tr><tr><td>0.250</td><td>8</td><td>5</td></tr><tr><td>0.275</td><td>9</td><td>5</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. 18 [V] | 0.000 | 2 | 2 | 0.050 | 2 | 3 | 0.100 | 3 | 3 | 0.150 | 4 | 3 | 0.200 | 5 | 4 | 0.250 | 8 | 5 | 0.275 | 9 | 5 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A] | Ripple Voltage [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9 [V] | Input Volt. 18 [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.000 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.050 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.100 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.150 | 4 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.200 | 5 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.250 | 8 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.275 | 9 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Measured by 100 MHz Oscilloscope.</p> <p>Ripple Voltage is shown as p-p in the figure below.</p> <p>Note: Slanted line shows the range of the rated load current.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><p>Ripple [mVp-p]</p><p>Fig.Complex Ripple Wave Form</p></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

COSEL

| Model | | SUW61212/SUCW61212 | | Temperature 25°C Testing Circuitry Figure B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------------|----------------------------------|--|--|--|------------------|---------------------|--|-------------------|--------------------|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | | Ripple Voltage (by Load Current) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>—△— Input Volt. 9V</div><div>- - -○- - - Input Volt. 18V</div></div><p>Ripple Voltage [mV]</p><p>Load Current [A]</p></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. 18 [V]</th></tr><tr><td>0.000</td><td>2</td><td>2</td></tr><tr><td>0.050</td><td>2</td><td>2</td></tr><tr><td>0.100</td><td>2</td><td>2</td></tr><tr><td>0.150</td><td>2</td><td>2</td></tr><tr><td>0.200</td><td>3</td><td>2</td></tr><tr><td>0.250</td><td>5</td><td>2</td></tr><tr><td>0.275</td><td>7</td><td>2</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. 18 [V] | 0.000 | 2 | 2 | 0.050 | 2 | 2 | 0.100 | 2 | 2 | 0.150 | 2 | 2 | 0.200 | 3 | 2 | 0.250 | 5 | 2 | 0.275 | 7 | 2 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A] | Ripple Voltage [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9 [V] | Input Volt. 18 [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.000 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.050 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.100 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.150 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.200 | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.250 | 5 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.275 | 7 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Measured by 100 MHz Oscilloscope.</p> <p>Ripple Voltage 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>Ripple [mVp-p]</div><p>Fig.Complex Ripple Wave Form</p></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

COSEL

| | | | |
|---------|--|--------------------|--|
| Model | | SUW61212/SUCW61212 | |
| Item | | Ripple-Noise | |
| Object | | +12V0.25A | |
| 1.Graph | | 2.Values | |

</

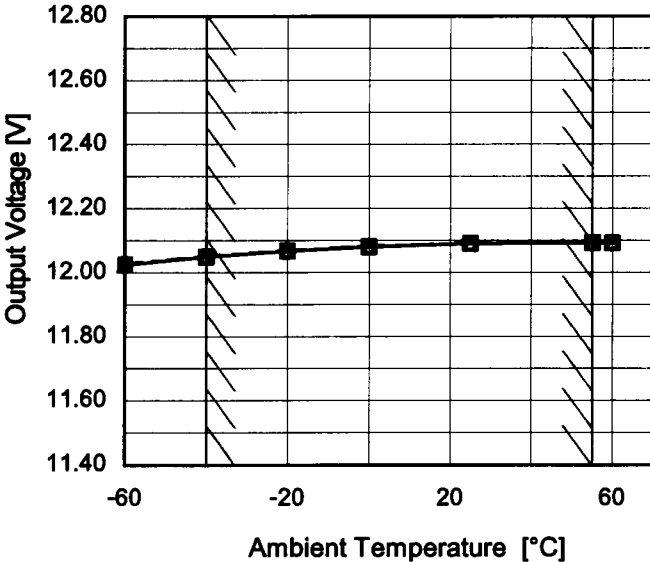
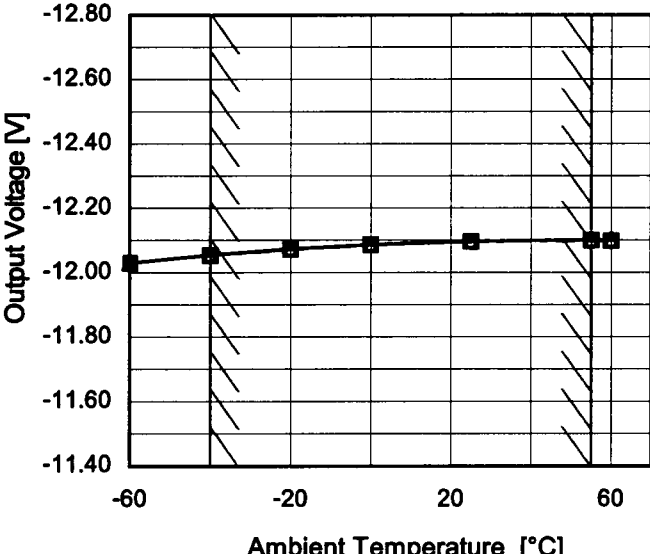
COSEL

| Model | | SUW61212/SUCW61212 | | Temperature 25°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------|--------------------|--|--|--|------------------|-------------------|--|-------------------|--------------------|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|-------|---|---|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | | Ripple-Noise | | Testing Circuitry Figure B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div>—△— Input Volt. 9V</div><div>- -○- - Input Volt. 18V</div></div><div>Ripple-Noise [mV]</div><div>Load Current [A]</div></div> <div><div>Measured by 100 MHz Oscilloscope.</div><div>Ripple-Noise is shown as p-p in the figure below.</div><div>Note: Slanted line shows the range of the rated load current.</div></div> <div><div><div>Ripple Noise[mVp-p]</div></div><div>Fig.Complex Ripple Noise Wave Form</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. 18 [V]</th></tr><tr><td>0.000</td><td>2</td><td>3</td></tr><tr><td>0.050</td><td>3</td><td>3</td></tr><tr><td>0.100</td><td>3</td><td>4</td></tr><tr><td>0.150</td><td>4</td><td>4</td></tr><tr><td>0.200</td><td>5</td><td>4</td></tr><tr><td>0.250</td><td>6</td><td>5</td></tr><tr><td>0.275</td><td>8</td><td>5</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. 18 [V] | 0.000 | 2 | 3 | 0.050 | 3 | 3 | 0.100 | 3 | 4 | 0.150 | 4 | 4 | 0.200 | 5 | 4 | 0.250 | 6 | 5 | 0.275 | 8 | 5 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Load Current [A] | Ripple-Noise [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9 [V] | Input Volt. 18 [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.000 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.050 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.100 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.150 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.200 | 5 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.250 | 6 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.275 | 8 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | BC-3704 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

COSEL

| Model | | SUW61212/SUCW61212 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------|-----------------------------------|-----------|--------------------------|---------------|----------------|-----|---|---|-----|---|---|-----|---|---|---|---|---|----|---|---|----|---|---|----|---|---|----|---|---|----|---|---|----|---|---|----|---|---|
| Item | | Ripple Voltage (by Ambient Temp.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <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>Load 50%</div><div>Load 100%</div></div> <div><table border="1"><caption>Data for +12V0.25A Graph</caption><thead><tr><th>Ambient Temperature [°C]</th><th>Load 50% [mV]</th><th>Load 100% [mV]</th></tr></thead><tbody><tr><td>-60</td><td>5</td><td>7</td></tr><tr><td>-40</td><td>5</td><td>6</td></tr><tr><td>-20</td><td>4</td><td>6</td></tr><tr><td>0</td><td>4</td><td>6</td></tr><tr><td>25</td><td>3</td><td>5</td></tr><tr><td>55</td><td>2</td><td>3</td></tr><tr><td>60</td><td>2</td><td>3</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></div> <div>Input Volt. 12V</div> | | | | Ambient Temperature [°C] | Load 50% [mV] | Load 100% [mV] | -60 | 5 | 7 | -40 | 5 | 6 | -20 | 4 | 6 | 0 | 4 | 6 | 25 | 3 | 5 | 55 | 2 | 3 | 60 | 2 | 3 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Ambient Temperature [°C] | Load 50% [mV] | Load 100% [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -60 | 5 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -40 | 5 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 4 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 4 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 3 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <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>Load 50%</div><div>Load 100%</div></div> <div><table border="1"><caption>Data for -12V0.25A Graph</caption><thead><tr><th>Ambient Temperature [°C]</th><th>Load 50% [mV]</th><th>Load 100% [mV]</th></tr></thead><tbody><tr><td>-60</td><td>2</td><td>3</td></tr><tr><td>-40</td><td>2</td><td>3</td></tr><tr><td>-20</td><td>2</td><td>3</td></tr><tr><td>0</td><td>2</td><td>2</td></tr><tr><td>25</td><td>2</td><td>2</td></tr><tr><td>55</td><td>1</td><td>2</td></tr><tr><td>60</td><td>1</td><td>2</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></div> <div>Input Volt. 12V</div> | | | | Ambient Temperature [°C] | Load 50% [mV] | Load 100% [mV] | -60 | 2 | 3 | -40 | 2 | 3 | -20 | 2 | 3 | 0 | 2 | 2 | 25 | 2 | 2 | 55 | 1 | 2 | 60 | 1 | 2 | -- | - | - | -- | - | - | -- | - | - | -- | - | - |
| Ambient Temperature [°C] | Load 50% [mV] | Load 100% [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -60 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -40 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Measured by 100 MHz Oscilloscope. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated ambient temperature. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testing Circuitry | | Figure B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ambient Temperature [°C] | | Ripple Voltage [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Load 50% | Load 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -60 | | 5 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -40 | | 5 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | | 4 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | 4 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | 3 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Ambient Temperature [°C] | | Ripple Voltage [mV] | |
| | | Load 50% | Load 100% |
| -60 | | 2 | 3 |
| -40 | | 2 | 3 |
| -20 | | 2 | 3 |
| 0 | | 2 | 2 |
| 25 | | 2 | 2 |
| 55 | | 1 | 2 |
| 60 | | 1 | 2 |
| -- | | - | - |
| -- | | - | - |
| -- | | - | - |
| -- | | - | - |
| - 14 - | | | |
| BC-3704 | | | |

| Model | | SUW61212/SUCW61212 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------|--|-------------------|--------------------------|--------------------|--|--|------------------|-------------------|-------------------|-----|---------|---------|---------|-----|---------|---------|---------|-----|---------|---------|---------|---|---------|---------|---------|----|---------|---------|---------|----|---------|---------|---------|----|---------|---------|---------|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| Item | | Ambient Temperature Drift | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | +12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | <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>Output Voltage [V]</div> <div>Ambient Temperature [°C]</div> <div>Load 100%</div> | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th></tr><tr><td>-60</td><td>12.024</td><td>12.026</td><td>12.027</td></tr><tr><td>-40</td><td>12.049</td><td>12.050</td><td>12.051</td></tr><tr><td>-20</td><td>12.067</td><td>12.068</td><td>12.069</td></tr><tr><td>0</td><td>12.080</td><td>12.081</td><td>12.082</td></tr><tr><td>25</td><td>12.090</td><td>12.091</td><td>12.091</td></tr><tr><td>55</td><td>12.092</td><td>12.093</td><td>12.093</td></tr><tr><td>60</td><td>12.092</td><td>12.092</td><td>12.093</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> | | Ambient Temperature [°C] | Output Voltage [V] | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | -60 | 12.024 | 12.026 | 12.027 | -40 | 12.049 | 12.050 | 12.051 | -20 | 12.067 | 12.068 | 12.069 | 0 | 12.080 | 12.081 | 12.082 | 25 | 12.090 | 12.091 | 12.091 | 55 | 12.092 | 12.093 | 12.093 | 60 | 12.092 | 12.092 | 12.093 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Ambient Temperature [°C] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -60 | 12.024 | 12.026 | 12.027 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -40 | 12.049 | 12.050 | 12.051 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | 12.067 | 12.068 | 12.069 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 12.080 | 12.081 | 12.082 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 12.090 | 12.091 | 12.091 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | 12.092 | 12.093 | 12.093 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 12.092 | 12.092 | 12.093 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | <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>Output Voltage [V]</div> <div>Ambient Temperature [°C]</div> <div>Load 100%</div> | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="3">Output Voltage [V]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th></tr><tr><td>-60</td><td>-12.030</td><td>-12.030</td><td>-12.030</td></tr><tr><td>-40</td><td>-12.055</td><td>-12.054</td><td>-12.054</td></tr><tr><td>-20</td><td>-12.074</td><td>-12.073</td><td>-12.072</td></tr><tr><td>0</td><td>-12.087</td><td>-12.087</td><td>-12.086</td></tr><tr><td>25</td><td>-12.097</td><td>-12.097</td><td>-12.096</td></tr><tr><td>55</td><td>-12.101</td><td>-12.100</td><td>-12.098</td></tr><tr><td>60</td><td>-12.100</td><td>-12.099</td><td>-12.098</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> | | Ambient Temperature [°C] | Output Voltage [V] | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | -60 | -12.030 | -12.030 | -12.030 | -40 | -12.055 | -12.054 | -12.054 | -20 | -12.074 | -12.073 | -12.072 | 0 | -12.087 | -12.087 | -12.086 | 25 | -12.097 | -12.097 | -12.096 | 55 | -12.101 | -12.100 | -12.098 | 60 | -12.100 | -12.099 | -12.098 | -- | - | - | - | -- | - | - | - | -- | - | - | - | -- | - | - | - |
| Ambient Temperature [°C] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -60 | -12.030 | -12.030 | -12.030 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -40 | -12.055 | -12.054 | -12.054 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -20 | -12.074 | -12.073 | -12.072 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | -12.087 | -12.087 | -12.086 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | -12.097 | -12.097 | -12.096 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | -12.101 | -12.100 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | -12.100 | -12.099 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -- | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated ambient temperature. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

- 15 -

BC-3704



| | | |
|-------|-------------------------|----------------------------|
| | | Testing Circuitry Figure A |
| Model | SUW61212/SUCW61212 | |
| Item | Output Voltage Accuracy | |

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 - 55°C

Input Voltage : 9 - 18V

Load Current (AVR 1) : 0 - 0.25A (AVR 2): 0 - 0.25A

* Other Output : Rated Load

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

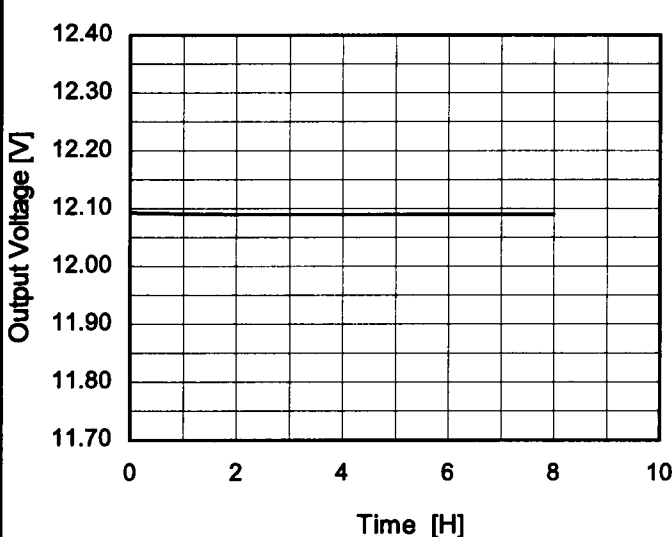
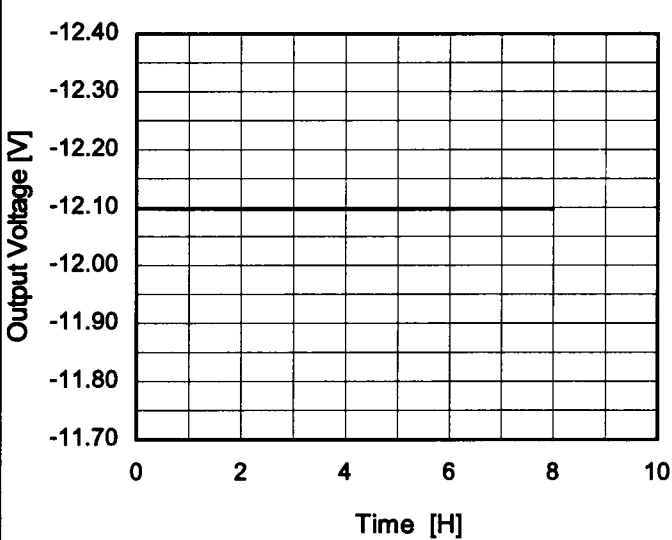
* Output Voltage Accuracy (Ratio) = $\frac{\text{Output Voltage Accuracy}}{\text{Rated Output Voltage}} \times 100$

2. Values

| Object | | +12V0.25A | | | |
|-----------------|---------------------|---------------------|------------|------------|--------------------------|
| Item | Temperature [°C] | Input Voltage[V] | Output | | Output Voltage Accuracy |
| | | | Current[A] | Voltage[V] | Value [mV] Ration [%] |
| Maximum Voltage | 55 | 9 | 0 | 12.373 | ±162 ±1.4 |
| Minimum Voltage | -40 | 9 | 0.25 | 12.049 | |

| Object | | -12V0.25A | | | |
|-----------------|---------------------|---------------------|------------|------------|--------------------------|
| Item | Temperature [°C] | Input Voltage[V] | Output | | Output Voltage Accuracy |
| | | | Current[A] | Voltage[V] | Value [mV] Ration [%] |
| Maximum Voltage | 55 | 9 | 0 | -12.390 | ±168 ±1.4 |
| Minimum Voltage | -40 | 18 | 0.25 | -12.054 | |

COSEL

| Model | SUW61212/SUCW61212 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------|--|----------------------------|----------------------|--------------------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| Item | Time Lapse Drift | | Temperature 25°C | | | | | | | | | | | | | | | | | | | | | | |
| Object | +12V0.25A | | Testing Circuitry Figure A | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | |
| <div><p>Output Voltage [V]</p><p>Time [H]</p><p>Input Volt. 12V</p><p>Load 100%</p></div> | | <table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>12.093</td></tr><tr><td>0.5</td><td>12.092</td></tr><tr><td>1.0</td><td>12.091</td></tr><tr><td>2.0</td><td>12.090</td></tr><tr><td>3.0</td><td>12.090</td></tr><tr><td>4.0</td><td>12.090</td></tr><tr><td>5.0</td><td>12.090</td></tr><tr><td>6.0</td><td>12.090</td></tr><tr><td>7.0</td><td>12.090</td></tr><tr><td>8.0</td><td>12.090</td></tr></table> | | Time since start [H] | Output Voltage [V] | 0.0 | 12.093 | 0.5 | 12.092 | 1.0 | 12.091 | 2.0 | 12.090 | 3.0 | 12.090 | 4.0 | 12.090 | 5.0 | 12.090 | 6.0 | 12.090 | 7.0 | 12.090 | 8.0 | 12.090 |
| Time since start [H] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 12.093 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 | 12.092 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 12.091 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.0 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | 12.090 | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | |
| <div><p>Output Voltage [V]</p><p>Time [H]</p><p>Input Volt. 12V</p><p>Load 100%</p></div> | | <table><tr><th>Time since start [H]</th><th>Output Voltage [V]</th></tr><tr><td>0.0</td><td>-12.099</td></tr><tr><td>0.5</td><td>-12.098</td></tr><tr><td>1.0</td><td>-12.098</td></tr><tr><td>2.0</td><td>-12.097</td></tr><tr><td>3.0</td><td>-12.097</td></tr><tr><td>4.0</td><td>-12.097</td></tr><tr><td>5.0</td><td>-12.097</td></tr><tr><td>6.0</td><td>-12.097</td></tr><tr><td>7.0</td><td>-12.097</td></tr><tr><td>8.0</td><td>-12.097</td></tr></table> | | Time since start [H] | Output Voltage [V] | 0.0 | -12.099 | 0.5 | -12.098 | 1.0 | -12.098 | 2.0 | -12.097 | 3.0 | -12.097 | 4.0 | -12.097 | 5.0 | -12.097 | 6.0 | -12.097 | 7.0 | -12.097 | 8.0 | -12.097 |
| Time since start [H] | Output Voltage [V] | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | -12.099 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | -12.098 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.0 | -12.097 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0 | -12.097 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 | -12.097 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.0 | -12.097 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | -12.097 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | -12.097 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 | -12.097 | | | | | | | | | | | | | | | | | | | | | | | | |

COSEL

Model

SUW61212/SUCW61212

Item

Rise and Fall Time

Temperature

25°C

Testing Circuitry

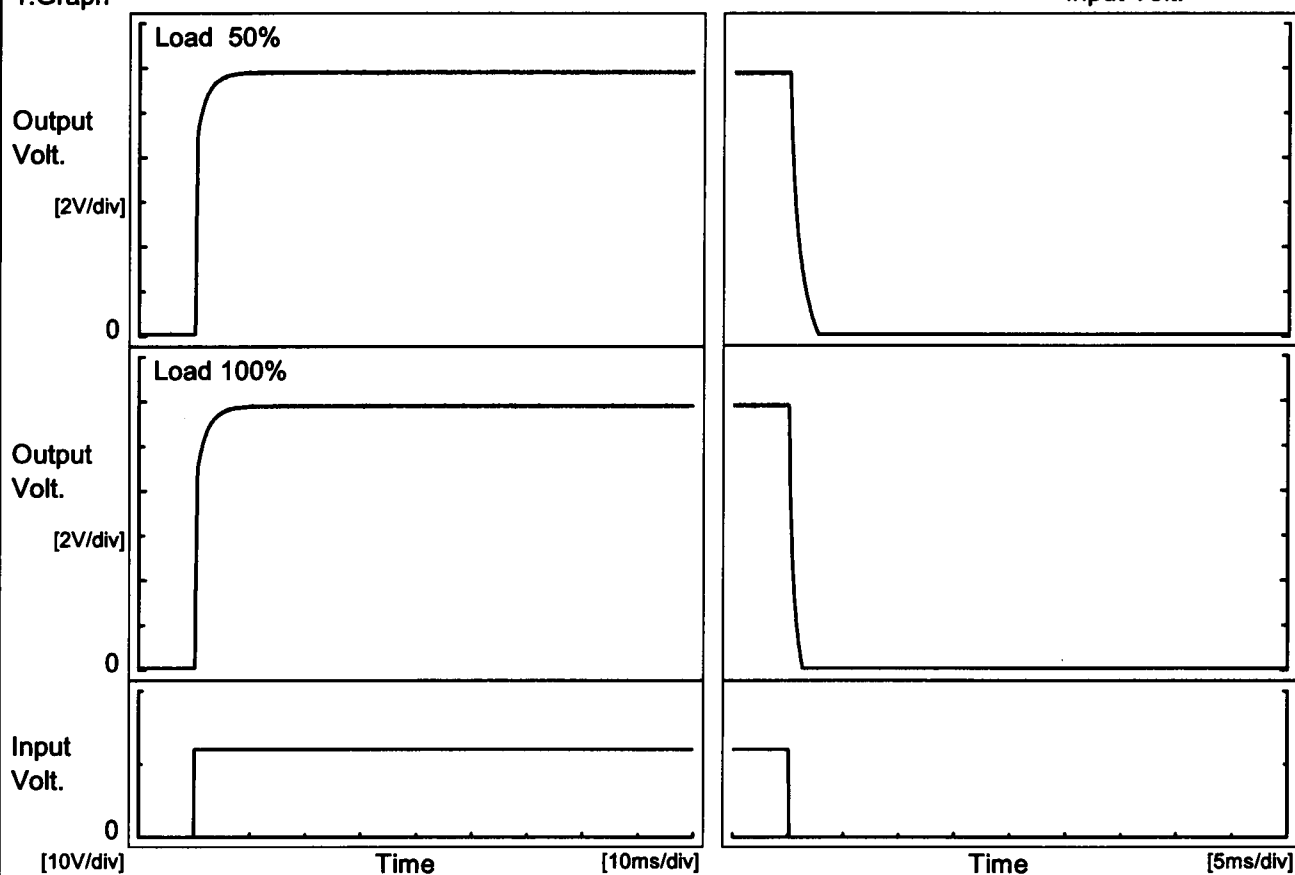
Figure A

Object

+12V0.25A

1.Graph

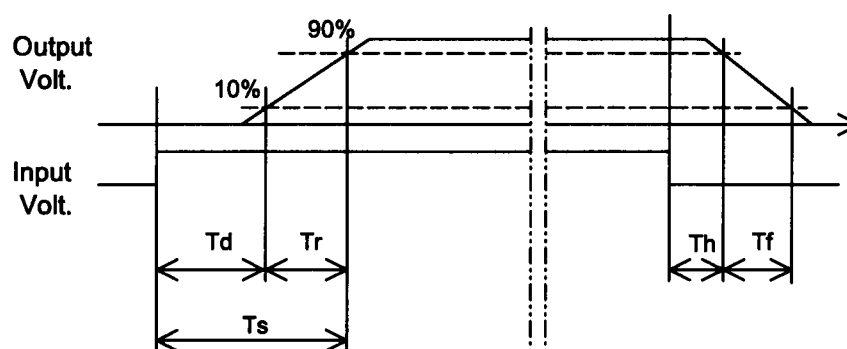
Input Volt. 12 V



2.Values

[ms]

| Load \ Time | Td | Tr | Ts | Th | Tf |
|-------------|-----|-----|-----|-----|-----|
| 50 % | 0.2 | 2.3 | 2.5 | 0.1 | 1.8 |
| 100 % | 0.2 | 2.5 | 2.7 | 0.1 | 0.9 |



COSEL

Model SUW61212/SUCW61212

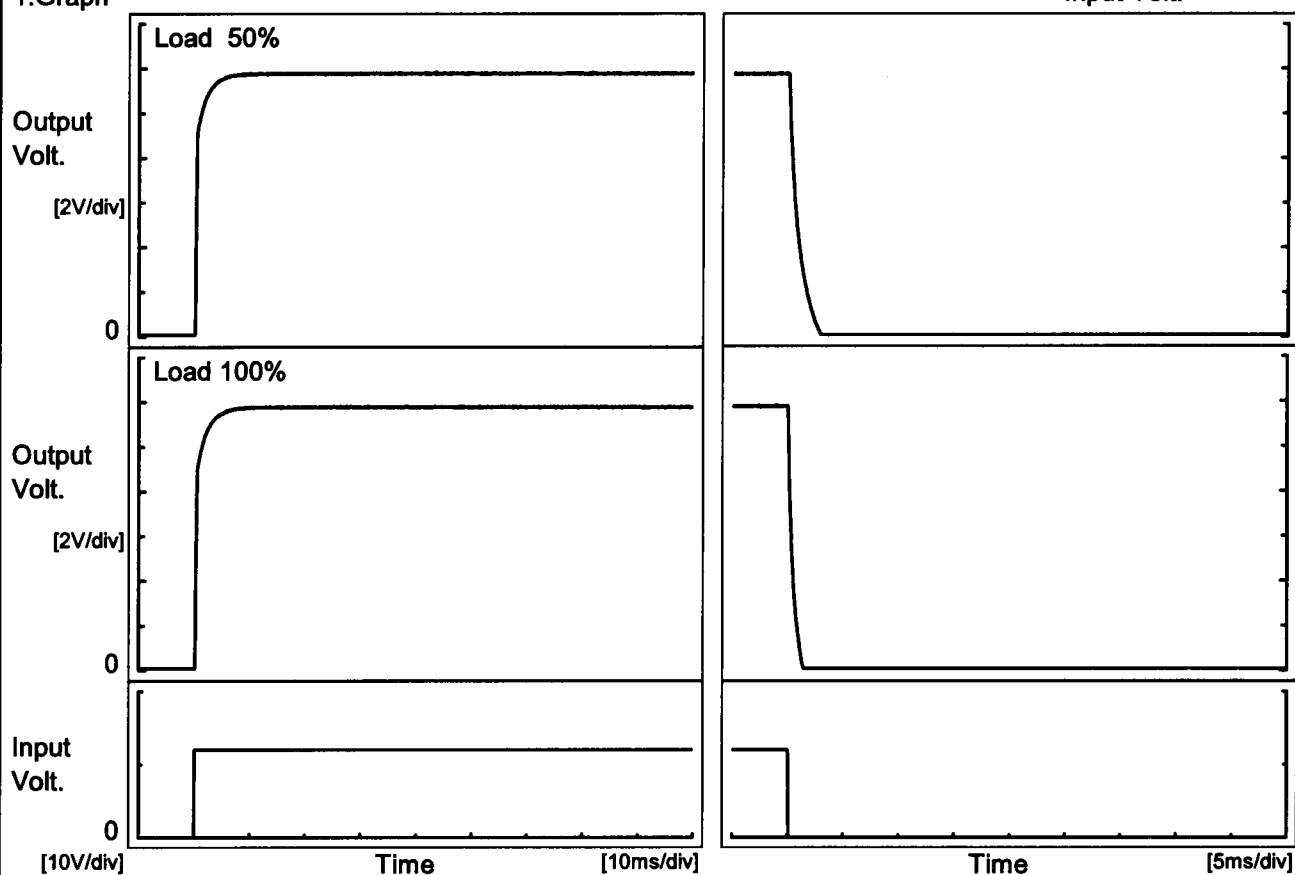
Item Rise and Fall Time

Temperature 25°C
Testing Circuitry Figure A

Object -12V0.25A

1. Graph

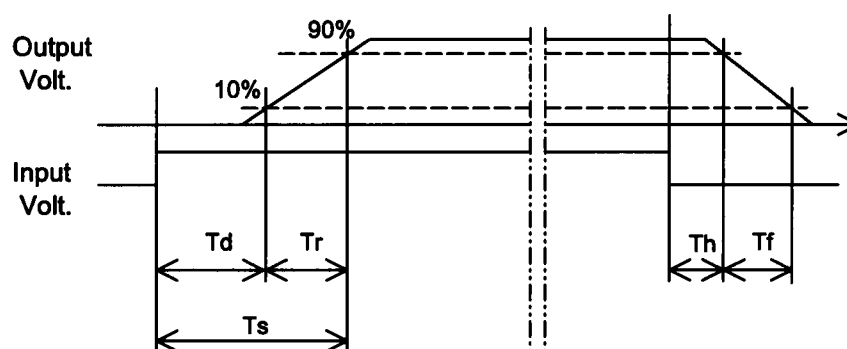
Input Volt. 12 V



2. Values

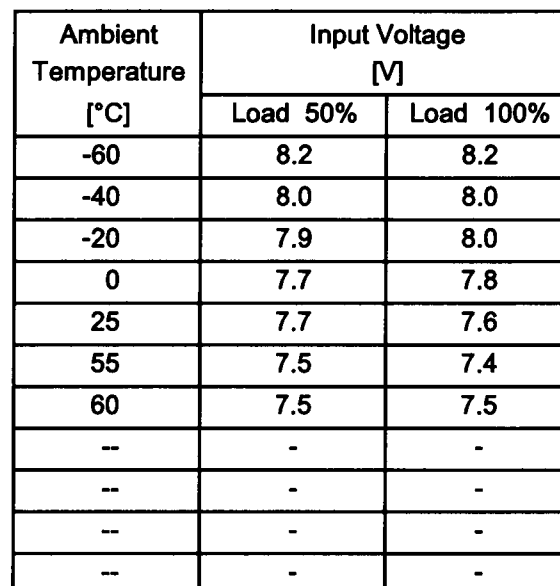
[ms]

| Load \ Time | Td | Tr | Ts | Th | Tf |
|-------------|-----|-----|-----|-----|-----|
| 50 % | 0.2 | 2.4 | 2.6 | 0.1 | 2.0 |
| 100 % | 0.2 | 2.5 | 2.7 | 0.1 | 1.0 |

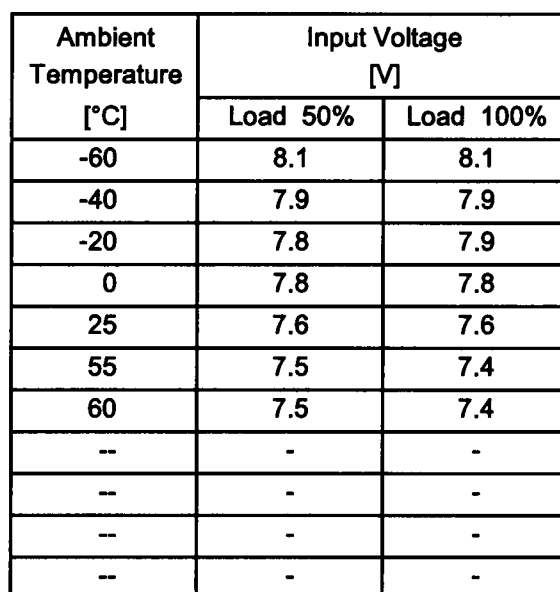


Testing Circuitry Figure A

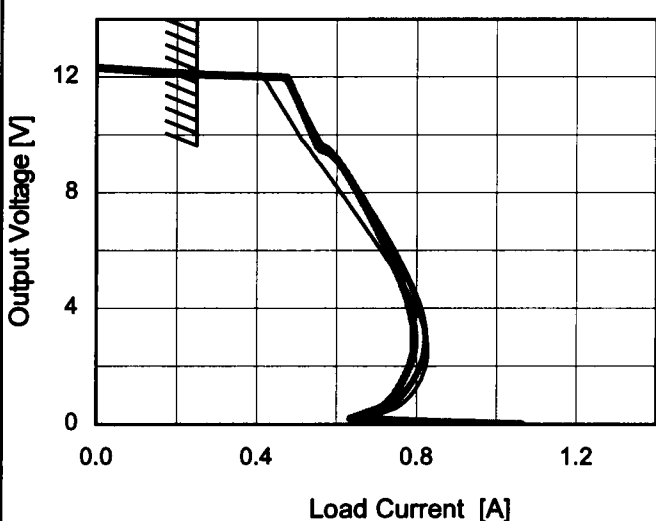
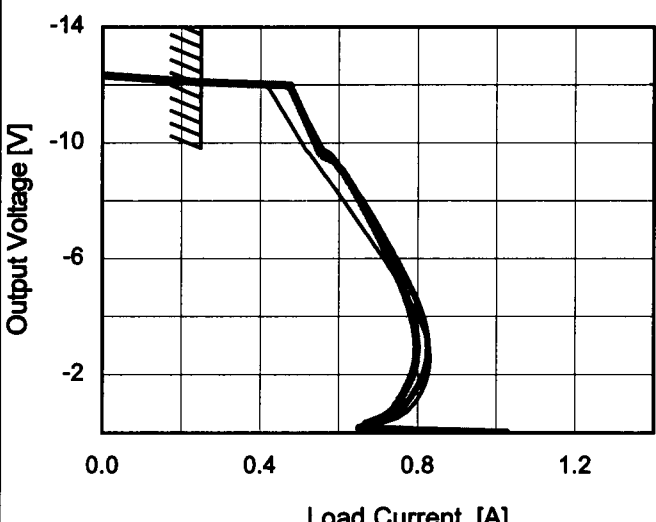
2.Values



2.Values



- 20 -

| Model | SUW61212/SUCW61212 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------------------|--|-------------------|--|--------------------|------------------|--|--|------------------|-------------------|-------------------|-------|------|------|------|-------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|
| Item | Overcurrent Protection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | +12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div></div><div></div><div></div></div><div>Input Volt. 9V Input Volt. 12V Input Volt. 18V</div></div>  | | <table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="3">Load Current [A]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th></tr><tr><td>12.0</td><td>0.25</td><td>0.25</td><td>0.25</td></tr><tr><td>11.4</td><td>0.44</td><td>0.49</td><td>0.49</td></tr><tr><td>10.8</td><td>0.47</td><td>0.52</td><td>0.51</td></tr><tr><td>9.6</td><td>0.53</td><td>0.58</td><td>0.55</td></tr><tr><td>8.4</td><td>0.59</td><td>0.64</td><td>0.64</td></tr><tr><td>7.2</td><td>0.65</td><td>0.69</td><td>0.68</td></tr><tr><td>6.0</td><td>0.71</td><td>0.75</td><td>0.73</td></tr><tr><td>4.8</td><td>0.77</td><td>0.79</td><td>0.76</td></tr><tr><td>3.6</td><td>0.81</td><td>0.82</td><td>0.79</td></tr><tr><td>2.4</td><td>0.83</td><td>0.82</td><td>0.79</td></tr><tr><td>1.2</td><td>0.80</td><td>0.78</td><td>0.76</td></tr><tr><td>0.0</td><td>1.09</td><td>1.06</td><td>1.06</td></tr></table> | | | Output Voltage [V] | Load Current [A] | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | 12.0 | 0.25 | 0.25 | 0.25 | 11.4 | 0.44 | 0.49 | 0.49 | 10.8 | 0.47 | 0.52 | 0.51 | 9.6 | 0.53 | 0.58 | 0.55 | 8.4 | 0.59 | 0.64 | 0.64 | 7.2 | 0.65 | 0.69 | 0.68 | 6.0 | 0.71 | 0.75 | 0.73 | 4.8 | 0.77 | 0.79 | 0.76 | 3.6 | 0.81 | 0.82 | 0.79 | 2.4 | 0.83 | 0.82 | 0.79 | 1.2 | 0.80 | 0.78 | 0.76 | 0.0 | 1.09 | 1.06 | 1.06 |
| Output Voltage [V] | Load Current [A] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 | 0.25 | 0.25 | 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11.4 | 0.44 | 0.49 | 0.49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10.8 | 0.47 | 0.52 | 0.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.6 | 0.53 | 0.58 | 0.55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.4 | 0.59 | 0.64 | 0.64 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.2 | 0.65 | 0.69 | 0.68 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | 0.71 | 0.75 | 0.73 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.8 | 0.77 | 0.79 | 0.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.6 | 0.81 | 0.82 | 0.79 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | 0.83 | 0.82 | 0.79 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | 0.80 | 0.78 | 0.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 1.09 | 1.06 | 1.06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Object | -12V0.25A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.Graph | | 2.Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div><div></div><div></div><div></div></div><div>Input Volt. 9V Input Volt. 12V Input Volt. 18V</div></div>  | | <table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="3">Load Current [A]</th></tr><tr><th>Input Volt. 9[V]</th><th>Input Volt. 12[V]</th><th>Input Volt. 18[V]</th></tr><tr><td>-12.0</td><td>0.25</td><td>0.25</td><td>0.25</td></tr><tr><td>-11.4</td><td>0.44</td><td>0.50</td><td>0.50</td></tr><tr><td>-10.8</td><td>0.47</td><td>0.52</td><td>0.51</td></tr><tr><td>-9.6</td><td>0.53</td><td>0.58</td><td>0.56</td></tr><tr><td>-8.4</td><td>0.59</td><td>0.64</td><td>0.64</td></tr><tr><td>-7.2</td><td>0.65</td><td>0.70</td><td>0.69</td></tr><tr><td>-6.0</td><td>0.72</td><td>0.75</td><td>0.73</td></tr><tr><td>-4.8</td><td>0.77</td><td>0.79</td><td>0.77</td></tr><tr><td>-3.6</td><td>0.82</td><td>0.82</td><td>0.79</td></tr><tr><td>-2.4</td><td>0.83</td><td>0.82</td><td>0.79</td></tr><tr><td>-1.2</td><td>0.80</td><td>0.78</td><td>0.76</td></tr><tr><td>0.0</td><td>1.04</td><td>1.03</td><td>1.03</td></tr></table> | | | Output Voltage [V] | Load Current [A] | | | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | -12.0 | 0.25 | 0.25 | 0.25 | -11.4 | 0.44 | 0.50 | 0.50 | -10.8 | 0.47 | 0.52 | 0.51 | -9.6 | 0.53 | 0.58 | 0.56 | -8.4 | 0.59 | 0.64 | 0.64 | -7.2 | 0.65 | 0.70 | 0.69 | -6.0 | 0.72 | 0.75 | 0.73 | -4.8 | 0.77 | 0.79 | 0.77 | -3.6 | 0.82 | 0.82 | 0.79 | -2.4 | 0.83 | 0.82 | 0.79 | -1.2 | 0.80 | 0.78 | 0.76 | 0.0 | 1.04 | 1.03 | 1.03 |
| Output Voltage [V] | Load Current [A] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Input Volt. 9[V] | Input Volt. 12[V] | Input Volt. 18[V] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -12.0 | 0.25 | 0.25 | 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -11.4 | 0.44 | 0.50 | 0.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -10.8 | 0.47 | 0.52 | 0.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -9.6 | 0.53 | 0.58 | 0.56 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -8.4 | 0.59 | 0.64 | 0.64 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -7.2 | 0.65 | 0.70 | 0.69 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -6.0 | 0.72 | 0.75 | 0.73 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -4.8 | 0.77 | 0.79 | 0.77 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -3.6 | 0.82 | 0.82 | 0.79 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -2.4 | 0.83 | 0.82 | 0.79 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -1.2 | 0.80 | 0.78 | 0.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 | 1.04 | 1.03 | 1.03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Note: Slanted line shows the range of the rated load current. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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BC-3704

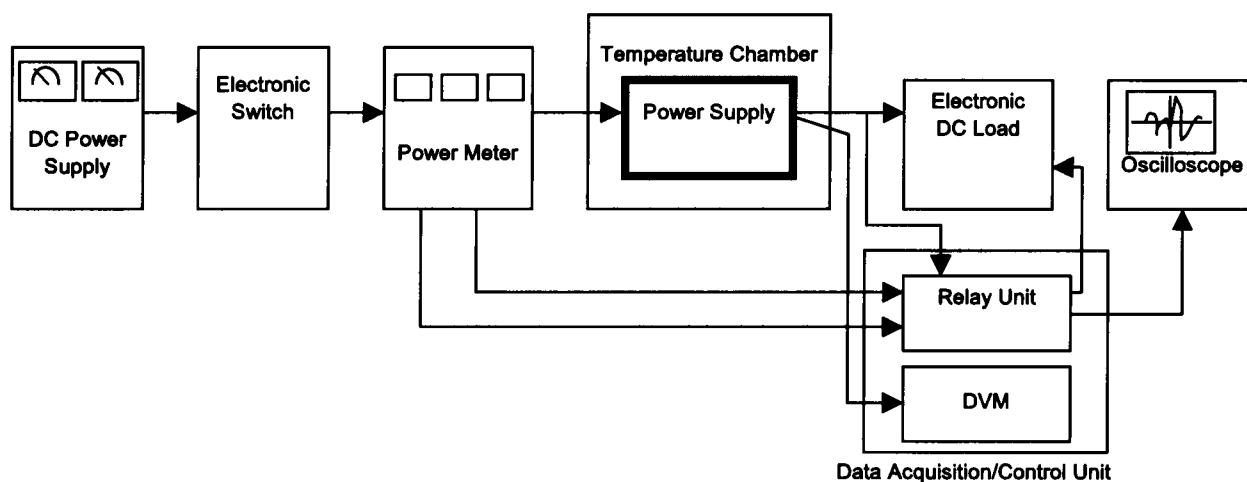


Figure A

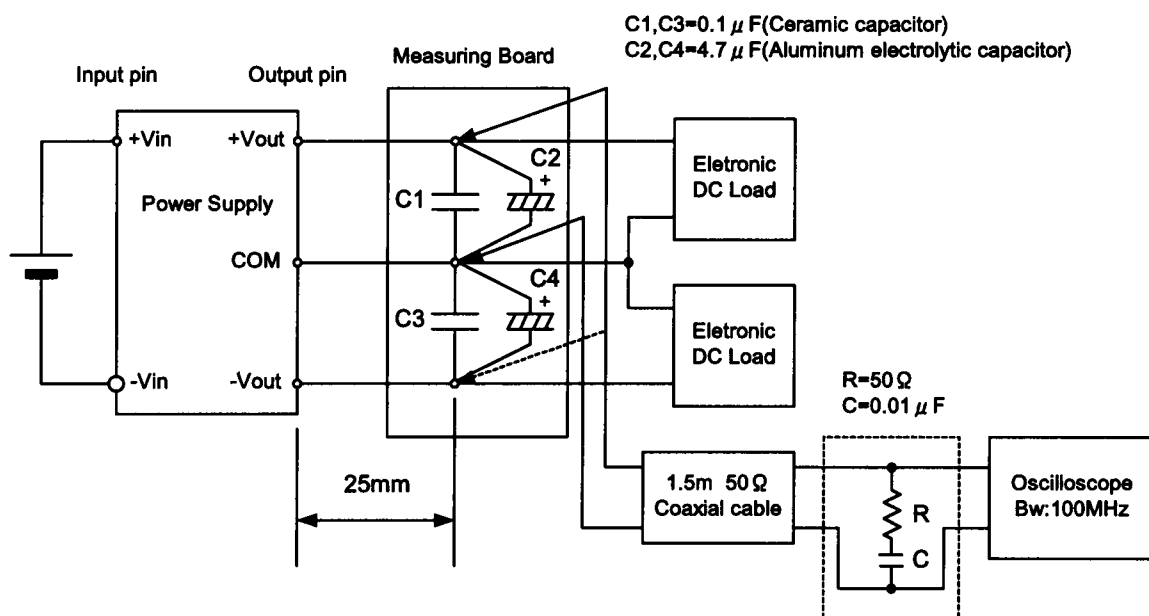


Figure B (Ripple and Ripple noise Characteristic)