

TEST DATA OF SPLFA50F-5

Regulated DC Power Supply
May 18, 2011

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COSEL CO.,LTD.

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Model		SPLFA50F-5																																																				
Item		Input Current (by Load Current)																																																				
Object																																																						
1.Graph		2.Values																																																				
<div><div><div>—△—</div><div>---□---</div><div>-·-○-·-</div></div><div><div>Input Volt.</div><div>Input Volt.</div><div>Input Volt.</div></div><div><div>100V</div><div>200V</div><div>230V</div></div></div> <p>Input Current [A]</p> <p>Load Current [A]</p>		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Input Current [A]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>0.045</td><td>0.032</td><td>0.032</td></tr><tr><td>1.5</td><td>0.126</td><td>0.081</td><td>0.073</td></tr><tr><td>3.0</td><td>0.214</td><td>0.126</td><td>0.113</td></tr><tr><td>4.5</td><td>0.311</td><td>0.176</td><td>0.157</td></tr><tr><td>6.0</td><td>0.400</td><td>0.212</td><td>0.197</td></tr><tr><td>7.5</td><td>0.493</td><td>0.255</td><td>0.234</td></tr><tr><td>9.0</td><td>0.587</td><td>0.300</td><td>0.270</td></tr><tr><td>10.0</td><td>0.651</td><td>0.331</td><td>0.295</td></tr><tr><td>11.0</td><td>0.716</td><td>0.363</td><td>0.322</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]	Input Current [A]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	0.045	0.032	0.032	1.5	0.126	0.081	0.073	3.0	0.214	0.126	0.113	4.5	0.311	0.176	0.157	6.0	0.400	0.212	0.197	7.5	0.493	0.255	0.234	9.0	0.587	0.300	0.270	10.0	0.651	0.331	0.295	11.0	0.716	0.363	0.322	--	-	-	-	--	-	-	-
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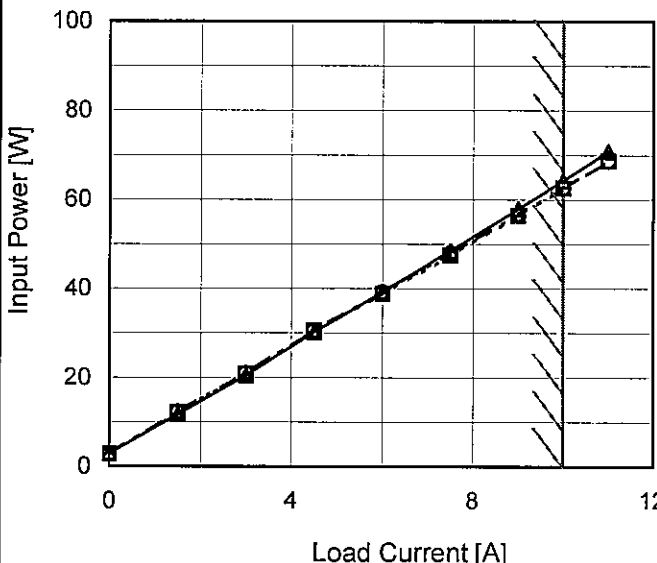
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Model		SPLFA50F-5		Temperature 25°C																																																				
Item		Input Power (by Load Current)		Testing Circuitry Figure A																																																				
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		<table><tr><th rowspan="2">Load Current [A]</th><th colspan="3">Input Power [W]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th><th>Input Volt. 230[V]</th></tr><tr><td>0.0</td><td>2.90</td><td>2.80</td><td>2.80</td></tr><tr><td>1.5</td><td>11.70</td><td>12.10</td><td>12.30</td></tr><tr><td>3.0</td><td>20.50</td><td>20.90</td><td>21.00</td></tr><tr><td>4.5</td><td>30.20</td><td>30.50</td><td>30.50</td></tr><tr><td>6.0</td><td>39.20</td><td>38.80</td><td>39.20</td></tr><tr><td>7.5</td><td>48.50</td><td>47.50</td><td>48.00</td></tr><tr><td>9.0</td><td>57.90</td><td>56.50</td><td>56.70</td></tr><tr><td>10.0</td><td>64.30</td><td>62.60</td><td>62.60</td></tr><tr><td>11.0</td><td>70.80</td><td>68.70</td><td>68.60</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]	Input Power [W]			Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]	0.0	2.90	2.80	2.80	1.5	11.70	12.10	12.30	3.0	20.50	20.90	21.00	4.5	30.20	30.50	30.50	6.0	39.20	38.80	39.20	7.5	48.50	47.50	48.00	9.0	57.90	56.50	56.70	10.0	64.30	62.60	62.60	11.0	70.80	68.70	68.60	--	-	-	-	--	-	-	-
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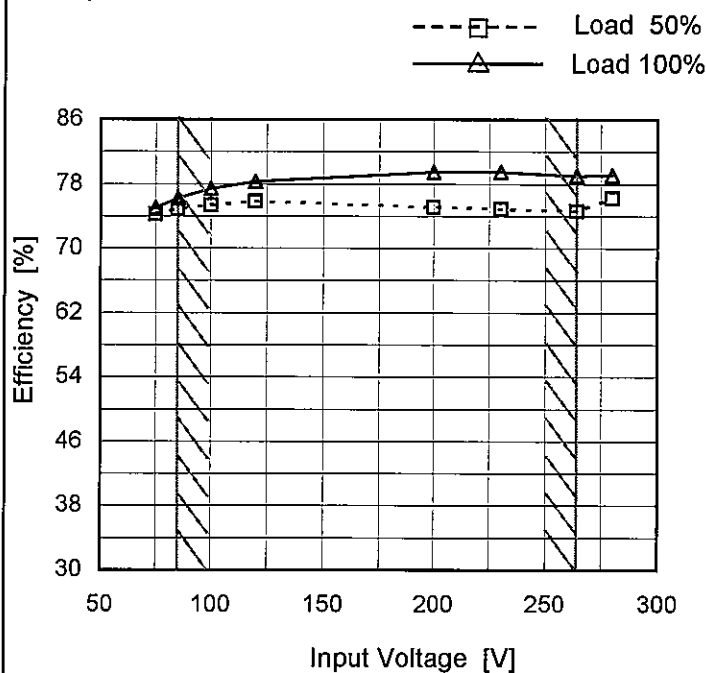
Model SPLFA50F-5

Item Efficiency (by Input Voltage)

Object

Temperature 25°C
Testing Circuitry Figure A

1. Graph



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

2. Values

Input Voltage [V]	Efficiency [%]	
	Load 50%	Load 100%
75	74.2	75.0
85	74.9	76.2
100	75.3	77.4
120	75.8	78.3
200	75.1	79.5
230	74.9	79.5
264	74.7	79.0
280	76.2	79.1
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Model

SPLFA50F-5

Item

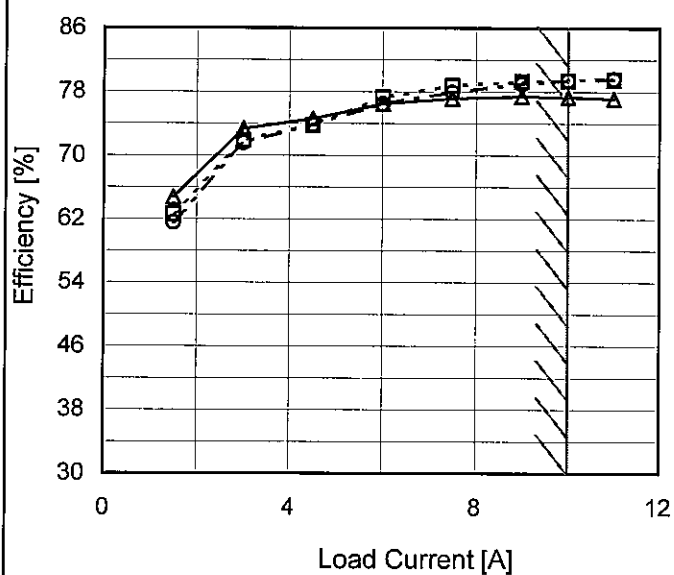
Efficiency (by Load Current)

Object

 Temperature 25°C
 Testing Circuitry Figure A

1. Graph

—△— Input Volt. 100V
 ---□--- Input Volt. 200V
 ---○--- Input Volt. 230V



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

2. Values

Load Current [A]	Efficiency [%]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	-	-	-
1.5	64.7	62.6	61.6
3.0	73.3	71.9	71.6
4.5	74.6	73.8	73.8
6.0	76.5	77.3	76.5
7.5	77.1	78.8	77.9
9.0	77.4	79.3	79.0
10.0	77.3	79.4	79.4
11.0	77.1	79.5	79.6
--	-	-	-
--	-	-	-

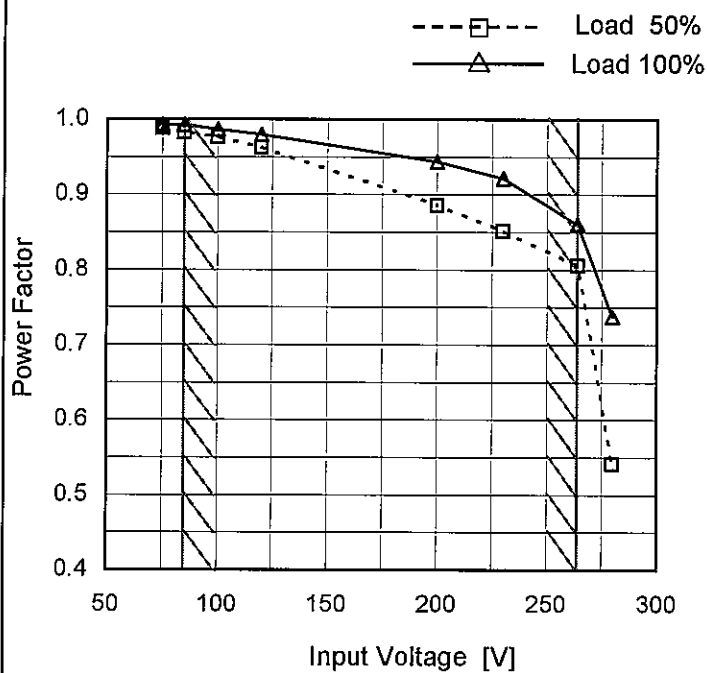
Model SPLFA50F-5

Item Power Factor (by Input Voltage)

Object

Temperature 25°C
Testing Circuitry Figure A

1. Graph



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

2. Values

Input Voltage [V]	Power Factor	
	Load 50%	Load 100%
75	0.988	0.993
85	0.982	0.992
100	0.976	0.986
120	0.962	0.980
200	0.886	0.944
230	0.852	0.922
264	0.805	0.860
280	0.541	0.737
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Model SPLFA50F-5

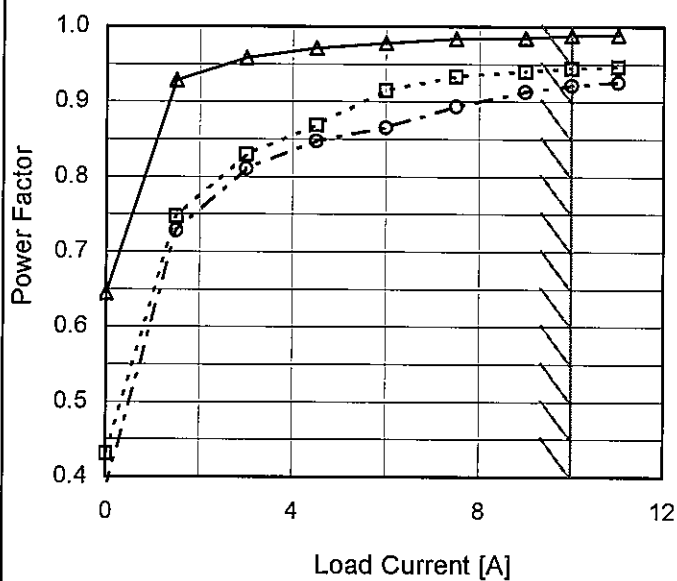
Item Power Factor (by Load Current)

Object

 Temperature 25°C
 Testing Circuitry Figure A

1. Graph

—△— Input Volt. 100V
 ---□--- Input Volt. 200V
 -·-○-·- Input Volt. 230V



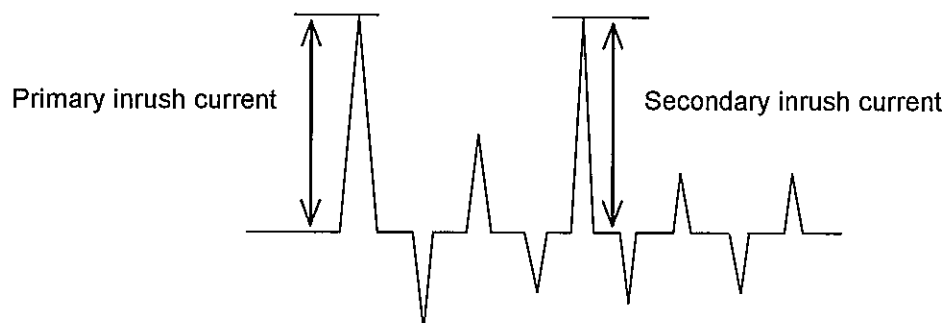
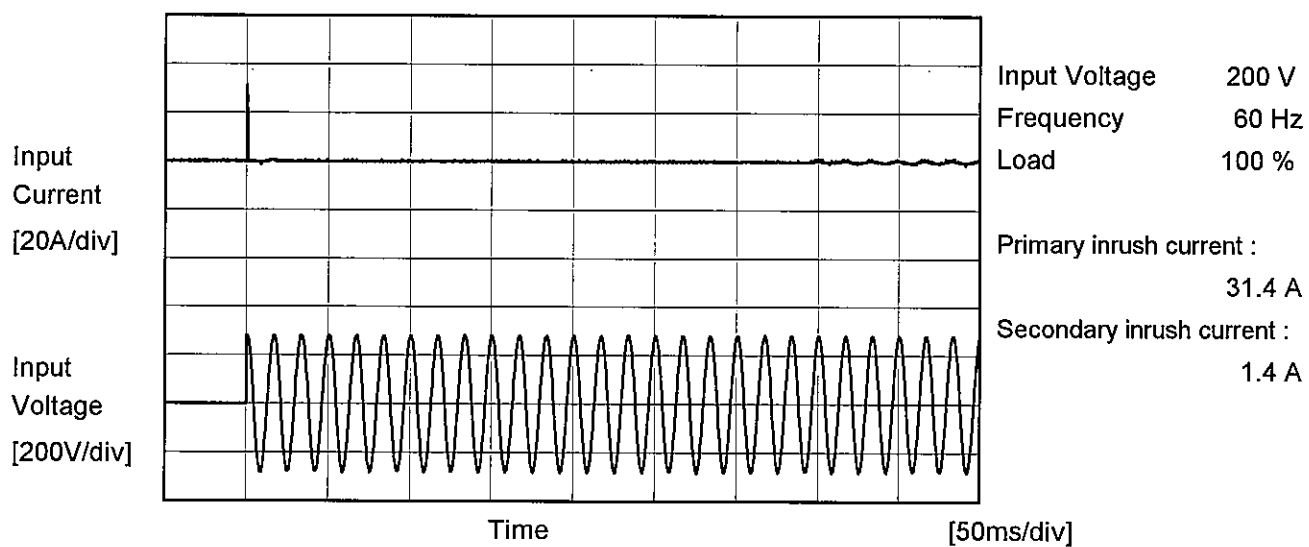
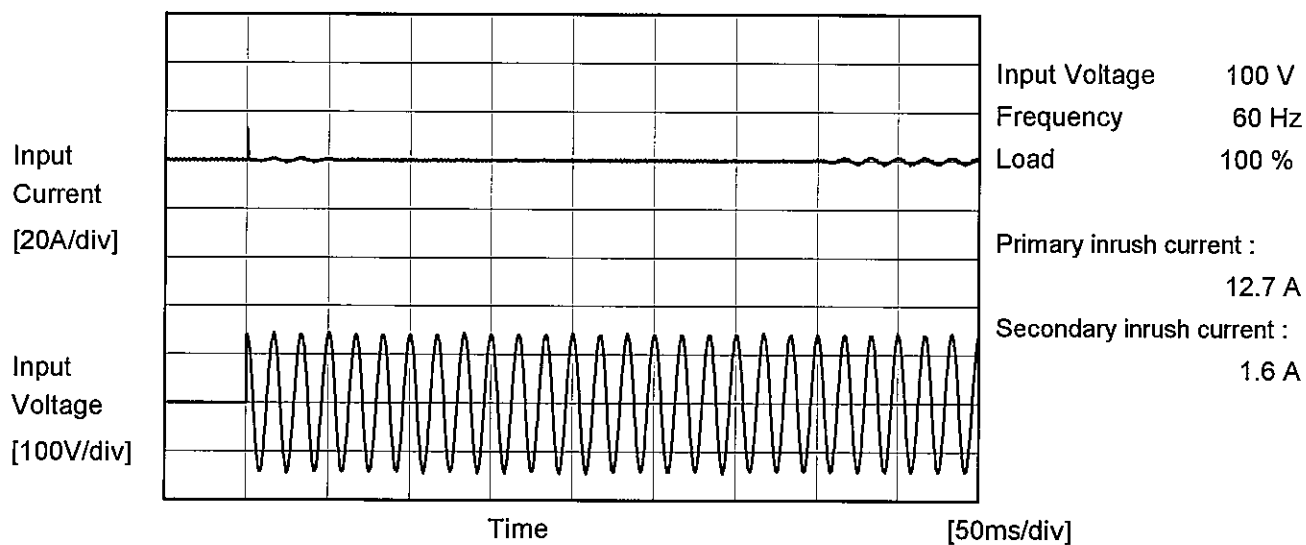
Note: Slanted line shows the range of the rated load current.

2. Values

Load Current [A]	Power Factor		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	0.644	0.431	0.384
1.5	0.929	0.747	0.728
3.0	0.958	0.829	0.811
4.5	0.971	0.869	0.847
6.0	0.978	0.915	0.865
7.5	0.984	0.933	0.894
9.0	0.985	0.940	0.913
10.0	0.988	0.944	0.922
11.0	0.989	0.946	0.926
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Model		SPLFA50F-5	
Item		Inrush Current	Temperature 25°C Testing Circuitry Figure A
Object			



		Temperature 25°C Testing Circuitry Figure B
Model	SPLFA50F-5	
Item	Leakage Current	
Object		

1.Results

Standards		Input Volt.			Note
		100 [V]	200 [V]	240 [V]	
DEN-AN	Both phases	0.15	0.25	0.31	Operation
	One of phases	0.20	0.47	0.57	Stand by
IEC60950-1	Both phases	0.17	0.28	0.33	Operation
	One of phases	0.22	0.45	0.53	Stand by

The value for "One of phases" is the reference value only.

2.Condition

Leakage current value is concluded after measuring both phases of AC input and by choosing the larger one.

Model	SPLFA50F-5																																		
Item	Line Regulation	Temperature	25°C																																
Object	+5V10A	Testing Circuitry	Figure A																																
1.Graph		2.Values																																	
<div><div>---□--- Load 50%</div><div>—△— Load 100%</div><p>Output Voltage [V]</p><p>Input Voltage [V]</p></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>75</td><td>5.034</td><td>5.000</td></tr><tr><td>85</td><td>5.034</td><td>5.000</td></tr><tr><td>100</td><td>5.034</td><td>4.999</td></tr><tr><td>120</td><td>5.034</td><td>4.999</td></tr><tr><td>200</td><td>5.034</td><td>4.999</td></tr><tr><td>230</td><td>5.034</td><td>4.999</td></tr><tr><td>264</td><td>5.034</td><td>4.999</td></tr><tr><td>280</td><td>5.034</td><td>4.999</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>		Input Voltage [V]	Output Voltage [V]		Load 50%	Load 100%	75	5.034	5.000	85	5.034	5.000	100	5.034	4.999	120	5.034	4.999	200	5.034	4.999	230	5.034	4.999	264	5.034	4.999	280	5.034	4.999	--	-	-
Input Voltage [V]	Output Voltage [V]																																		
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Note: Slanted line shows the range of the rated input voltage.																																			

Model SPLFA50F-5

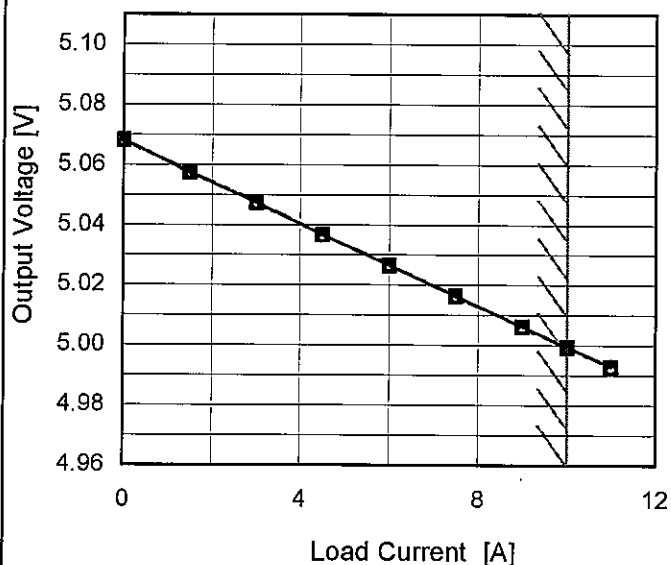
Item Load Regulation

Object +5V10A

Temperature 25°C
Testing Circuitry Figure A

1. Graph

—△— Input Volt. 100V
 ---□--- Input Volt. 200V
 -·-○-·- Input Volt. 230V



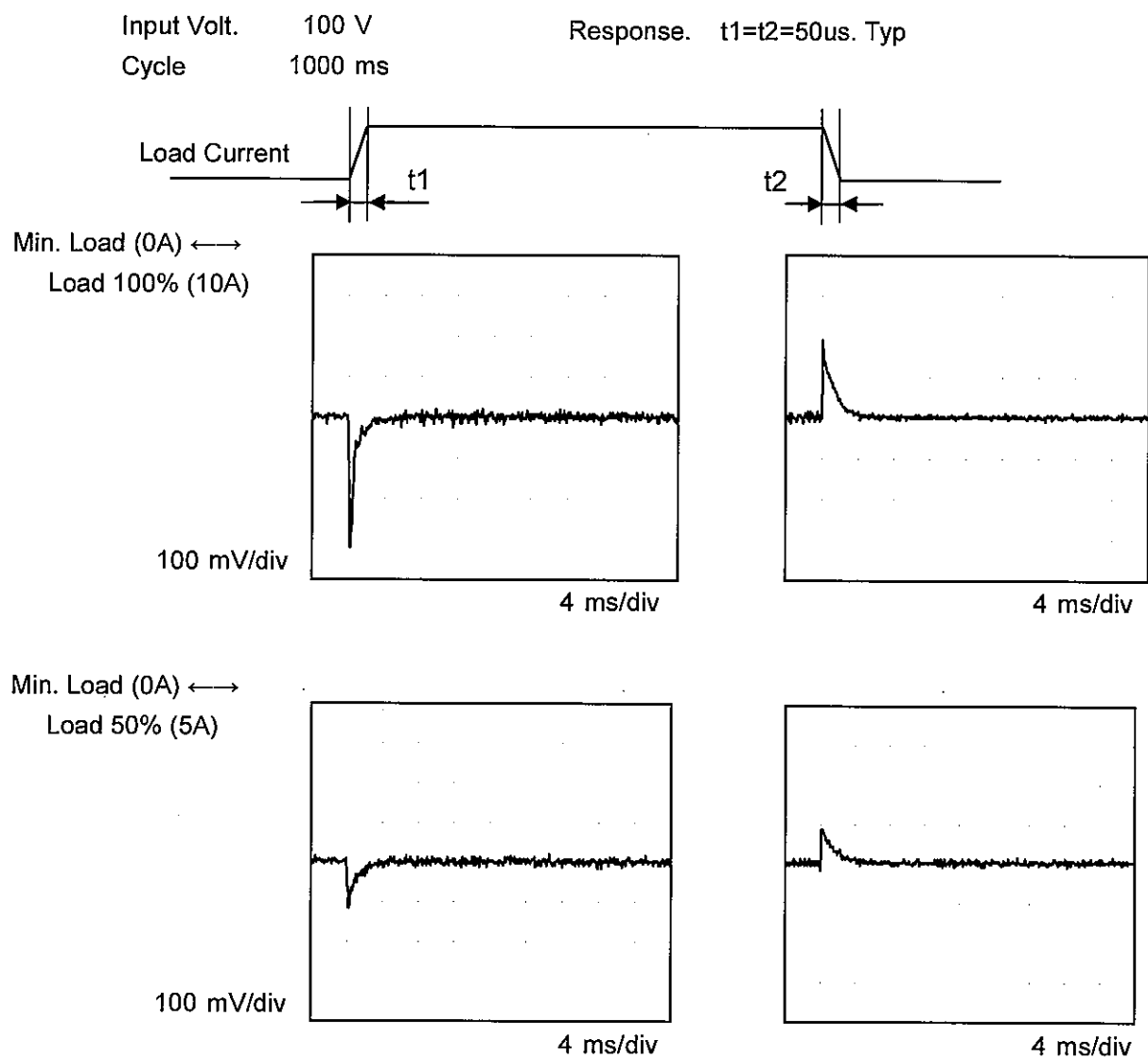
Note: Slanted line shows the range of the rated load current.

2. Values

Load Current [A]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	5.068	5.068	5.068
1.5	5.057	5.057	5.058
3.0	5.047	5.047	5.048
4.5	5.037	5.037	5.037
6.0	5.027	5.027	5.027
7.5	5.016	5.016	5.016
9.0	5.006	5.006	5.006
10.0	5.000	4.999	4.999
11.0	4.993	4.993	4.993
--	-	-	-
--	-	-	-

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Model	SPLFA50F-5	Temperature Testing Circuitry	25°C Figure A
Item	Dynamic Load Response		
Object	+5V10A		



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Model		SPLFA50F-5	
Item		Ripple Voltage (by Load Current)	
Object		+5V10A	
1.Graph		2.Values	

—△— Input Volt. 100V
- - -○- - - Input Volt. 200V

Ripple Voltage [mV]

Load Current [A]

Load Current [A]	Ripple Voltage [mV]	
	Input Volt. 100 [V]	Input Volt. 200 [V]
0	20	20
2	15	15
4	15	15
6	15	20
8	20	25
10	25	25
11	25	25
--	-	-
--	-	-
--	-	-
--	-	-

Measured by 20 MHz Oscilloscope.
Ripple Voltage is shown as p-p in the figure below.
Note: Slanted line shows the range of the rated load current.

T1: Due to AC Input Line
T2: Due to Switching

Ripple [mVp-p]

T1

T2

Fig. Complex Ripple Wave Form

Model		SPLFA50F-5	
Item		Ripple-Noise	
Object		+5V10A	
1.Graph		2.Values	

—△— Input Volt. 100V
-·-○-·- Input Volt. 200V

Load Current [A]	Ripple-Noise [mV]	
	Input Volt. 100 [V]	Input Volt. 200 [V]
0	110	120
2	130	140
4	140	150
6	150	160
8	150	160
10	150	160
11	160	170
--	-	-
--	-	-
--	-	-
--	-	-

Measured by 20 MHz Oscilloscope.
Ripple-Noise is shown as p-p in the figure below.
Note: Slanted line shows the range of the rated load current.

T1: Due to AC Input Line
T2: Due to Switching

Fig. Complex Ripple Wave Form

Model	SPLFA50F-5																																											
Item	Ripple Voltage (by Ambient Temp.)	Testing Circuitry Figure A																																										
Object	+5V10A																																											
1.Graph		2.Values																																										
<div><div>---□--- Input Volt. 100V</div><div>—△— Input Volt. 200V</div></div> <p>Y-axis: Ripple Voltage [mV]</p> <p>X-axis: Ambient Temperature [°C]</p> <p>Load 100 %</p>		<table><tr><th rowspan="2">Ambient Temperature [°C]</th><th colspan="2">Ripple Voltage [mV]</th></tr><tr><th>Input Volt. 100 [V]</th><th>Input Volt. 200 [V]</th></tr><tr><td>-30</td><td>100</td><td>100</td></tr><tr><td>-10</td><td>60</td><td>60</td></tr><tr><td>0</td><td>50</td><td>50</td></tr><tr><td>25</td><td>25</td><td>25</td></tr><tr><td>50</td><td>25</td><td>25</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><tr><td>--</td><td>-</td><td>-</td></tr><tr><td>--</td><td>-</td><td>-</td></tr></table>		Ambient Temperature [°C]	Ripple Voltage [mV]		Input Volt. 100 [V]	Input Volt. 200 [V]	-30	100	100	-10	60	60	0	50	50	25	25	25	50	25	25	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-
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Measured by 20 MHz Oscilloscope.																																												
Note: Slanted line shows the range of the rated ambient temperature.																																												

Model

SPLFA50F-5

Item

Ambient Temperature Drift

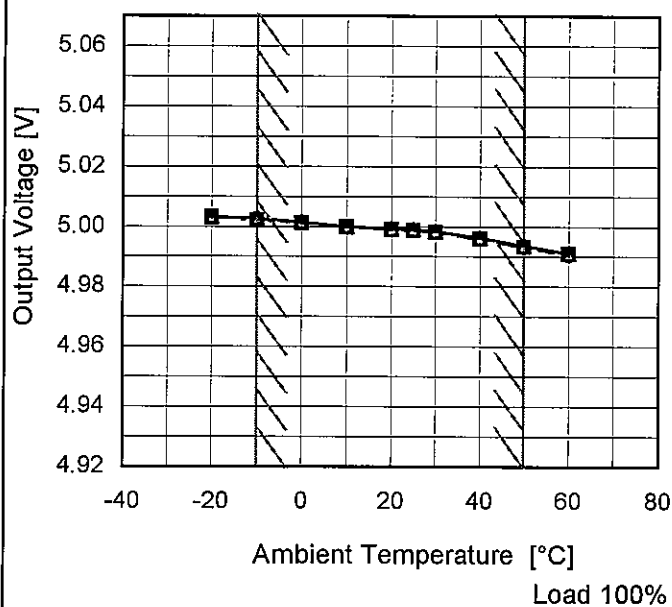
Object

+5V10A

Testing Circuitry Figure A

1. Graph

—△— Input Volt. 100V
 ---□--- Input Volt. 200V
 -·-○-·- Input Volt. 230V



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

2. Values

Ambient Temperature [°C]	Output Voltage [V]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
-20	5.003	5.003	5.003
-10	5.003	5.002	5.002
0	5.001	5.001	5.001
10	5.000	5.000	5.000
20	4.999	4.999	4.999
25	4.999	4.999	4.999
30	4.999	4.998	4.998
40	4.996	4.996	4.996
50	4.994	4.993	4.993
60	4.991	4.991	4.991
--	-	-	-

		Testing Circuitry Figure A
Model	SPLFA50F-5	
Item	Output Voltage Accuracy	
Object	+5V10A	

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 : -10 - 50°C

Input Voltage : 85 - 264V

Load Current : 0 - 10A

* 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

Item	Temperature [°C]	Input Voltage[V]	Output		Output Voltage Accuracy	
			Current[A]	Voltage[V]	Value [mV]	Ratio [%]
Maximum Voltage	30	264	0	5.068	±38	±0.8
Minimum Voltage	50	264	10	4.993		

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Model	SPLFA50F-5	Temperature25°C Testing CircuitryFigure A	
Item	Time Lapse Drift		
Object	+5V10A		
1.Graph		2.Values	
<div><div><div>Output Voltage [V]</div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></di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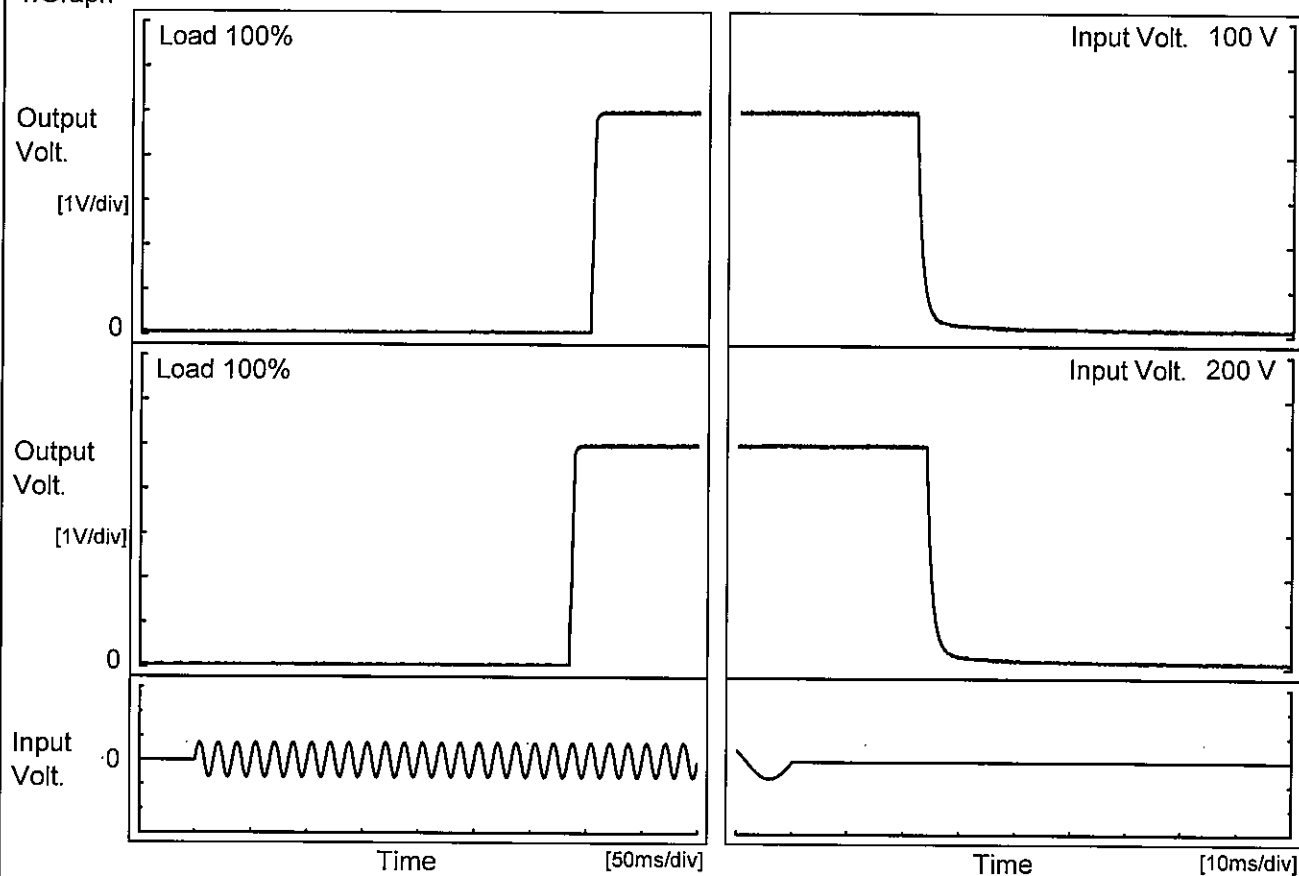
Model SPLFA50F-5

Item Rise and Fall Time

Object +5V10A

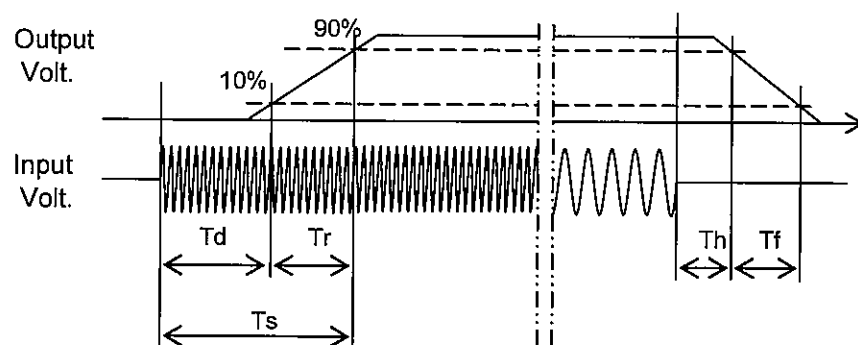
Temperature 25°C
Testing Circuitry Figure A

1. Graph



2. Values

Input Volt.	Time	Td	Tr	Ts	Th	Tf
100 V		353.3	3.8	357.1	22.2	2.7
200 V		335.0	4.0	339.0	24.3	2.7



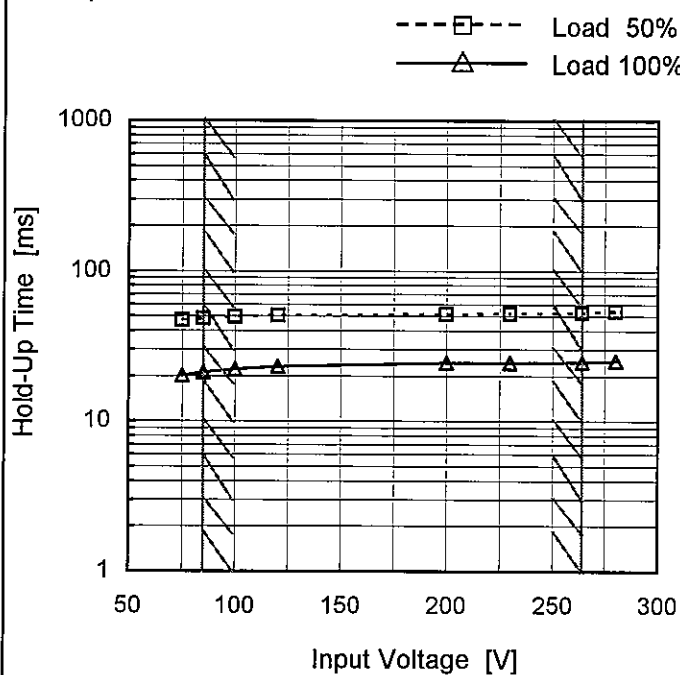
Model SPLFA50F-5

Item Hold-Up Time

Object +5V/10A

 Temperature 25°C
 Testing Circuitry Figure A

1. Graph



This duration covers from Shut-off of input voltage to the moment when output voltage descends to the rated range of voltage accuracy.
 Note: Slanted line shows the range of the rated input voltage.

2. Values

Input Voltage [V]	Hold-Up Time [ms]	
	Load 50%	Load 100%
75	47	20
85	48	21
100	50	22
120	51	23
200	52	24
230	52	25
264	53	25
280	54	25
--	-	-

Model

SPLFA50F-5

Item

Instantaneous Interruption Compensation

Object

+5V10A

1.Graph

—△—

Input Volt. 100V

---□---

Input Volt. 200V

---○---

Input Volt. 230V

Instantaneous Compensation Time [ms]

1000

100

10

1

0

4

8

12

Load Current [A]

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

Temperature

25°C

Testing Circuitry

Figure A

2.Values

Load Current [A]	Time [ms]		
	Input Volt. 100[V]	Input Volt. 200[V]	Input Volt. 230[V]
0.0	-	-	-
1.5	154	157	157
3.0	80	85	85
4.5	54	56	56
6.0	38	40	43
7.5	29	32	32
9.0	23	27	28
10.0	21	23	23
11.0	17	20	20
--	-	-	-
--	-	-	-

Model

SPLFA50F-5

Item

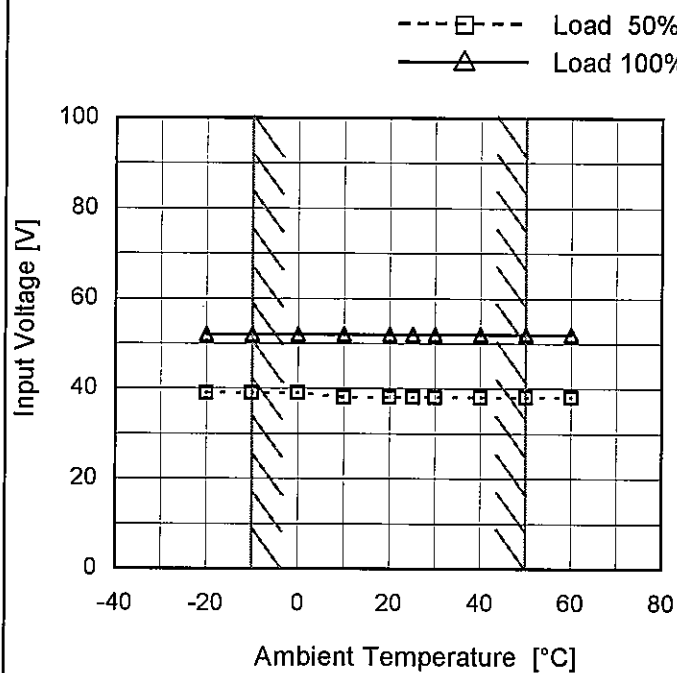
Minimum Input Voltage
for Regulated Output Voltage

Object

+5V10A

Testing Circuitry Figure A

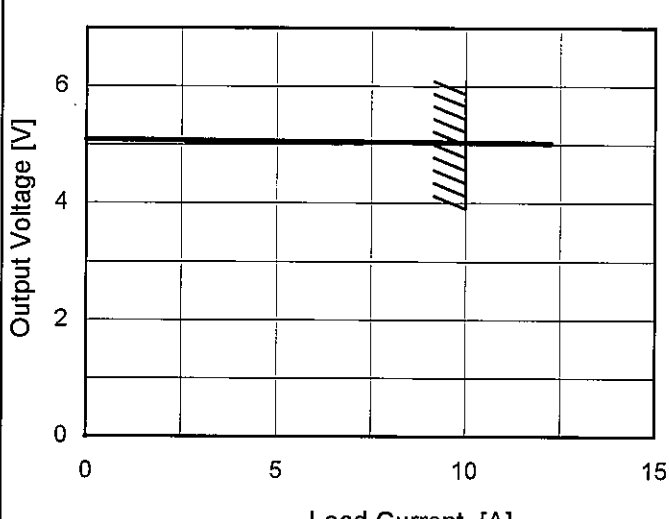
1. Graph



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

2. Values

Ambient Temperature [°C]	Input Voltage [V]	
	Load 50%	Load 100%
-20	39	52
-10	39	52
0	39	52
10	38	52
20	38	52
25	38	52
30	38	52
40	38	52
50	38	52
60	38	52
--	-	-

Model	SPLFA50F-5																																																	
Item	Overcurrent Protection	Temperature	25°C																																															
Object	+5V10A	Testing Circuitry	Figure A																																															
1.Graph		2.Values																																																
<div><div><div></div>Input Volt. 100V</div><div><div></div>Input Volt. 200V</div></div>  <p>Note: Slanted line shows the range of the rated load current.</p> <p>Intermittent operation occurs when the output voltage is from 4.8V to 0V.</p>		<table><tr><th rowspan="2">Output Voltage [V]</th><th colspan="2">Load Current [A]</th></tr><tr><th>Input Volt. 100[V]</th><th>Input Volt. 200[V]</th></tr><tr><td>5.030</td><td>12.28</td><td>12.24</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><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><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>		Output Voltage [V]	Load Current [A]		Input Volt. 100[V]	Input Volt. 200[V]	5.030	12.28	12.24	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-	--	-	-
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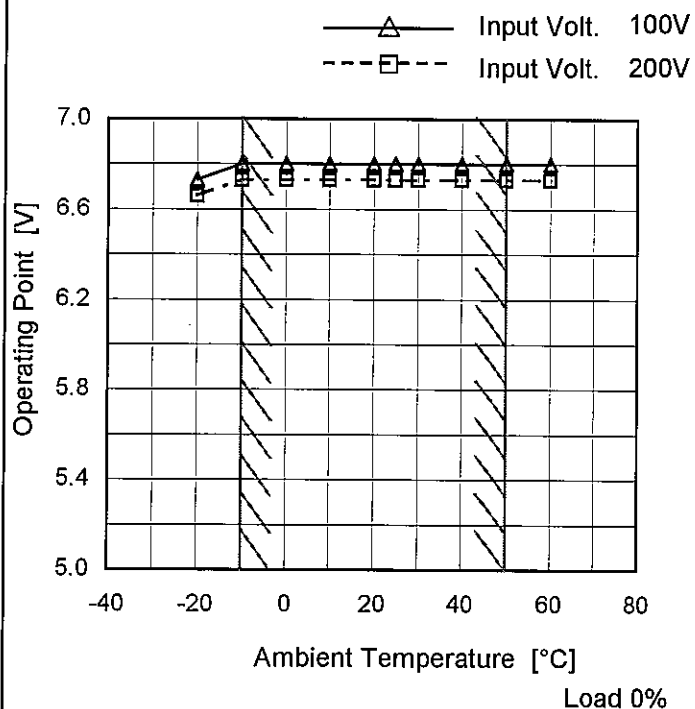
Model SPLFA50F-5

Item Overvoltage Protection

Object +5V10A

Testing Circuitry Figure A

1. Graph



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

2. Values

Ambient Temperature [°C]	Operating Point [V]	
	Input Volt. 100[V]	Input Volt. 200[V]
-20	6.73	6.66
-10	6.80	6.73
0	6.80	6.73
10	6.80	6.73
20	6.80	6.73
25	6.80	6.73
30	6.80	6.73
40	6.80	6.73
50	6.80	6.73
60	6.80	6.73
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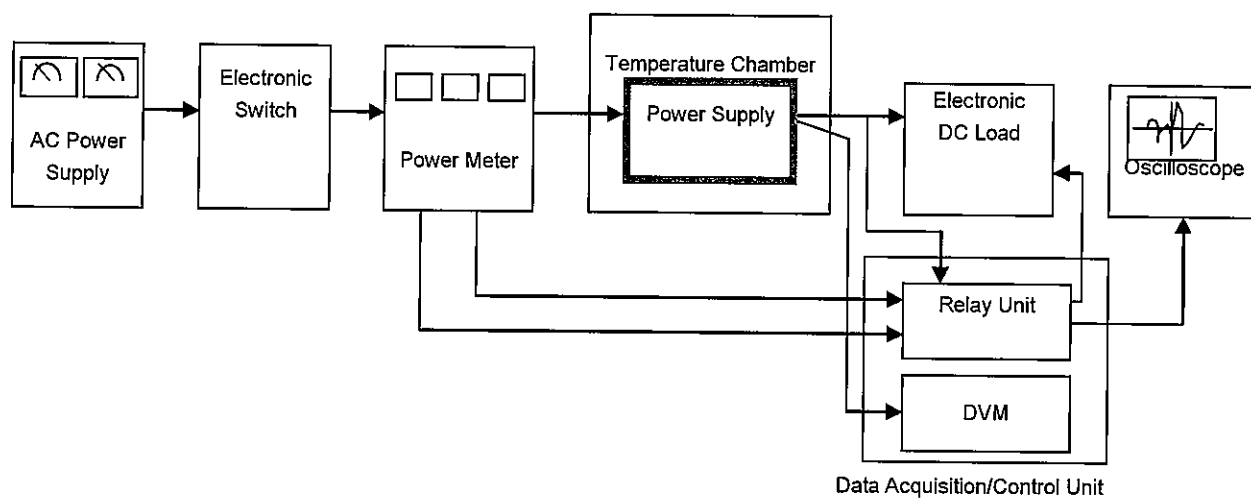


Figure A

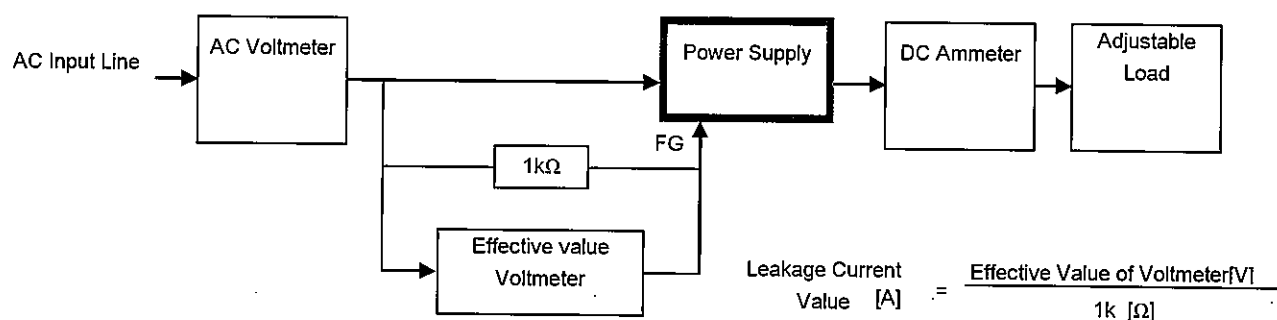


Figure B (DEN-AN)

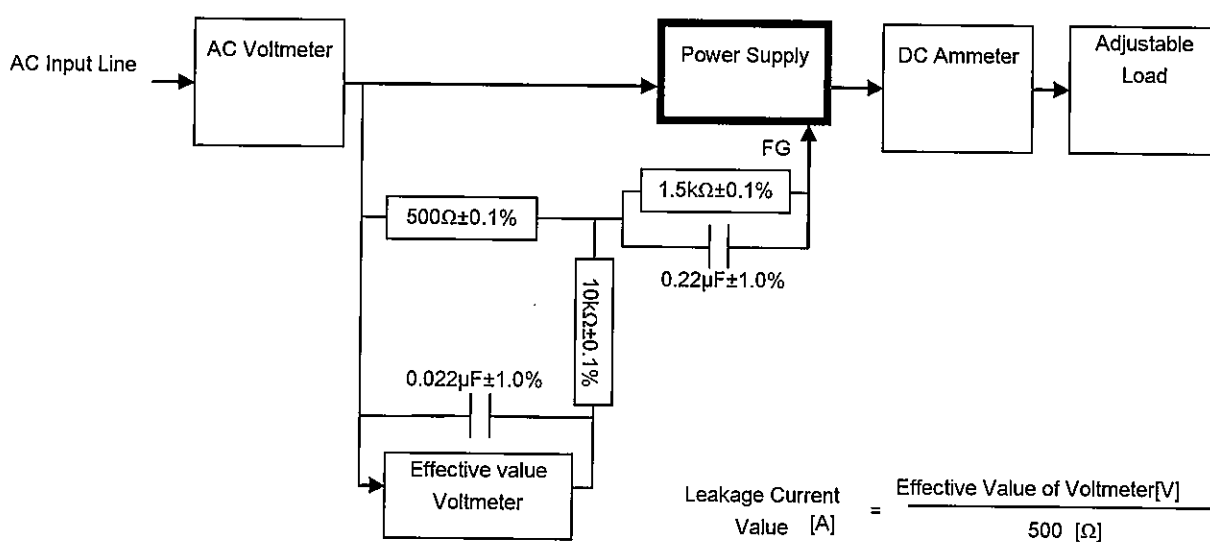


Figure B (IEC60950-1)