

CHVM2R5-12-0350PW

EVALUATION DATA

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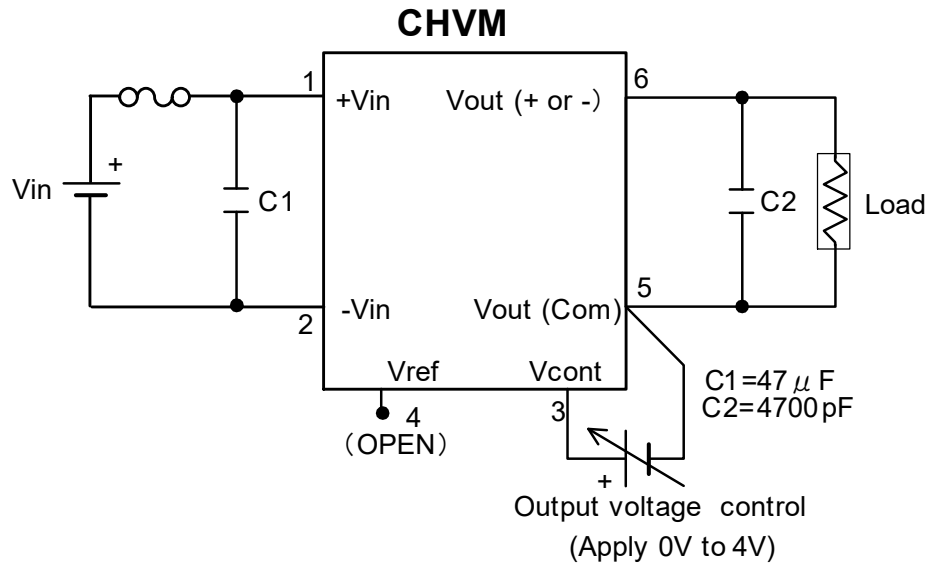
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Definition

Vin	···Input voltage
Vout	···Output voltage
Iout	···Output current
Vcont	···Output voltage control
Ta	···Ambient temperature

Test results are reference data based on our measurement condition.

1. Test circuit



2. Steady State Characteristics

Condition Ta : -20°C

Test Item			Load : Open			Load : 12kΩ		
	Input Voltage	Vcont	Input Current	Output Voltage	Ripple/ Noise	Input Current	Output Voltage	Ripple/ Noise
	[V]	[V]	[mA]	[V]	[mV p-p]	[mA]	[V]	[mV p-p]
	10.8	4.0	64	350.26	40	315	349.96	50
		3.0	54	262.96	35	248	262.72	40
		2.0	43	175.28	30	173	175.12	30
		1.0	32	87.76	30	97	87.69	25
	12.0	4.0	66	350.26	40	315	349.95	50
		3.0	55	262.95	35	249	262.73	40
		2.0	44	175.28	30	174	175.11	30
		1.0	34	87.77	30	99	87.68	25
	13.2	4.0	67	350.26	40	315	349.95	50
		3.0	56	262.94	35	250	262.72	40
	2.0	46	175.27	30	175	175.12	30	
	1.0	35	87.76	30	100	87.69	25	

	Spec	Data
Line reg.	-	10mV
Load reg.	-	310mV
Ripple/Noise	-	50mV p-p

*Ta=-20°C is out of specification range.

Note : Line reg. and Load reg. were measured individually.

2. Steady State Characteristics

Condition Ta : 25°C

Test Item			Load : Open			Load : 12kΩ		
	Input Voltage	Vcont	Input Current	Output Voltage	Ripple/ Noise	Input Current	Output Voltage	Ripple/ Noise
	[V]	[V]	[mA]	[V]	[mV p-p]	[mA]	[V]	[mV p-p]
	10.8	4.0	58	350.37	15	315	350.08	25
		3.0	49	262.64	10	243	262.43	18
		2.0	40	175.26	5	169	175.12	10
		1.0	31	87.75	5	96	87.65	5
	12.0	4.0	59	350.39	15	315	350.11	25
		3.0	50	262.65	10	244	262.44	18
		2.0	41	175.27	5	170	175.14	10
		1.0	32	87.74	5	97	87.66	5
	13.2	4.0	61	350.41	15	320	350.13	25
		3.0	51	262.66	10	245	262.44	18
	2.0	42	175.29	5	171	175.15	10	
	1.0	33	87.74	5	98	87.66	5	

	Spec	Data
Line reg.	70mV typ	50mV
Load reg.	700mV typ	280mV
Ripple/Noise	100mV p-p max	25mV p-p

Note : Line reg. and Load reg. were measured individually.

2. Steady State Characteristics

Condition Ta : 65°C

Test Item			Load : Open			Load : 12kΩ		
	Input Voltage	Vcont	Input Current	Output Voltage	Ripple/ Noise	Input Current	Output Voltage	Ripple/ Noise
	[V]	[V]	[mA]	[V]	[mV p-p]	[mA]	[V]	[mV p-p]
	10.8	4.0	56	350.86	45	315	350.62	50
		3.0	47	263.25	40	242	263.09	45
		2.0	38	175.39	35	168	175.28	40
		1.0	30	87.78	30	96	87.72	30
	12.0	4.0	57	350.86	45	315	350.63	50
		3.0	48	263.25	40	243	263.08	45
		2.0	39	175.40	35	169	175.29	40
		1.0	31	87.79	30	97	87.72	30
	13.2	4.0	58	350.86	45	318	350.64	50
		3.0	49	263.25	40	244	263.07	45
	2.0	41	175.40	35	170	175.29	40	
	1.0	33	87.79	30	98	87.73	30	

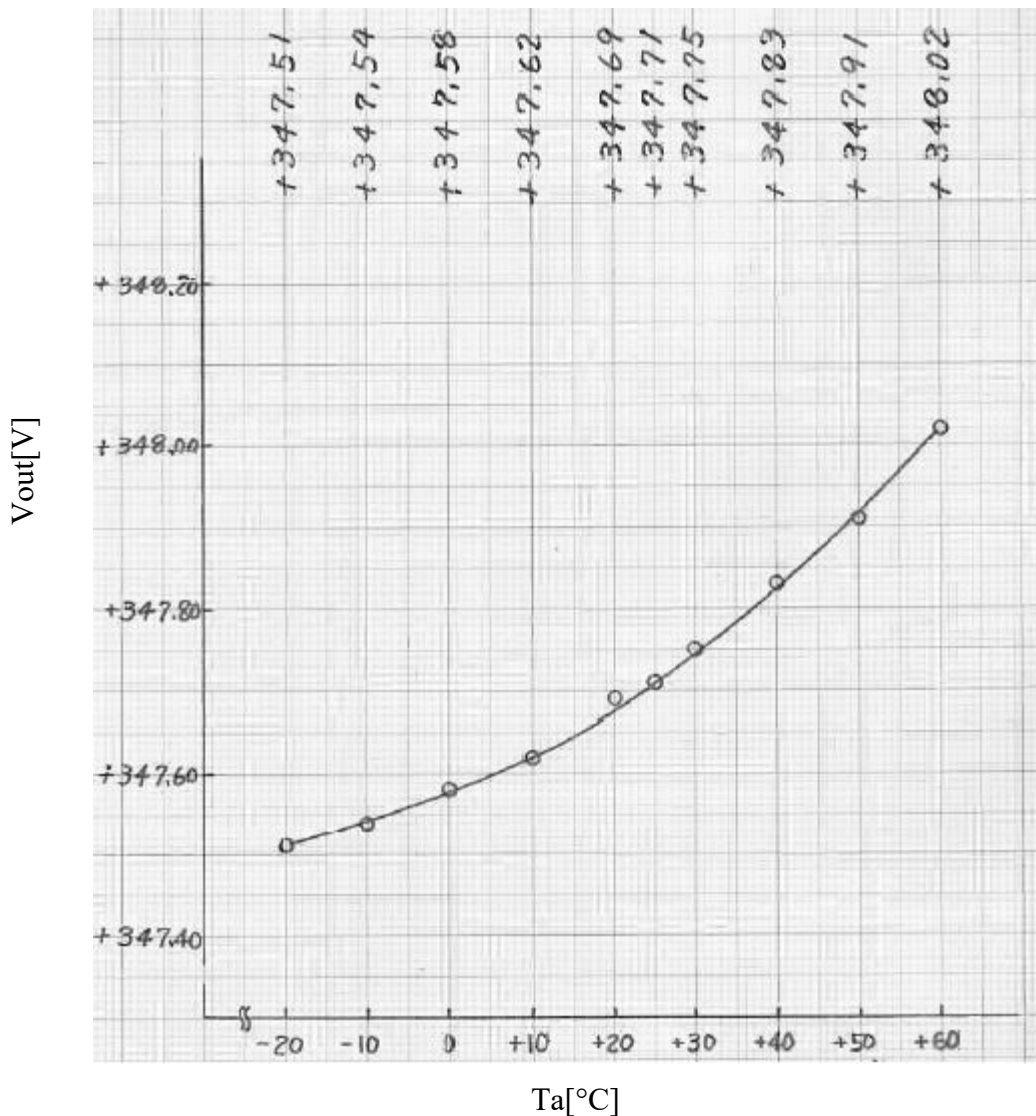
	Spec	Data
Line reg.	-	20mV
Load reg.	-	230mV
Ripple/Noise	-	50mV p-p

*Ta=65°C is out of specification range.

Note : Line reg. and Load reg. were measured individually.

3. Temperature Regulation

Conditions
 Vin : 12V
 Load : 50kΩ
 Vcont : 4V

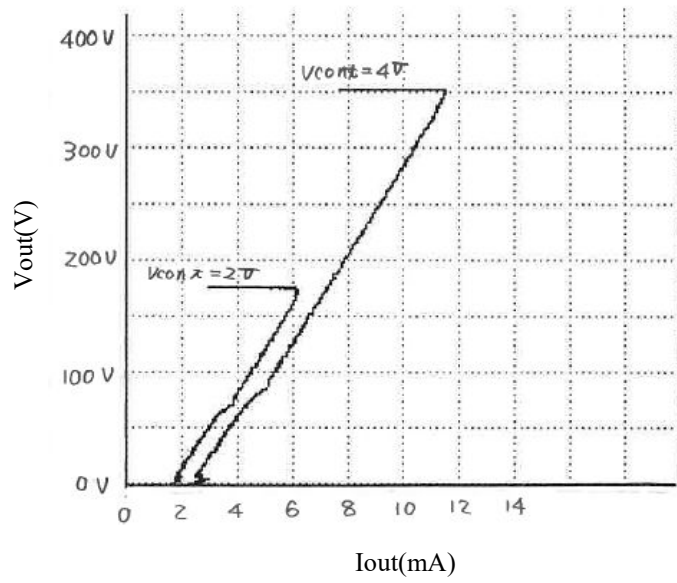


Ta [°C]	Vout [V]
-20	347.51
-10	347.54
0	347.58
10	347.62
20	347.69
30	347.75
40	347.83
50	347.91
60	348.02

*Ta=-20°C is out of specification range.

4. Over Current Characteristics

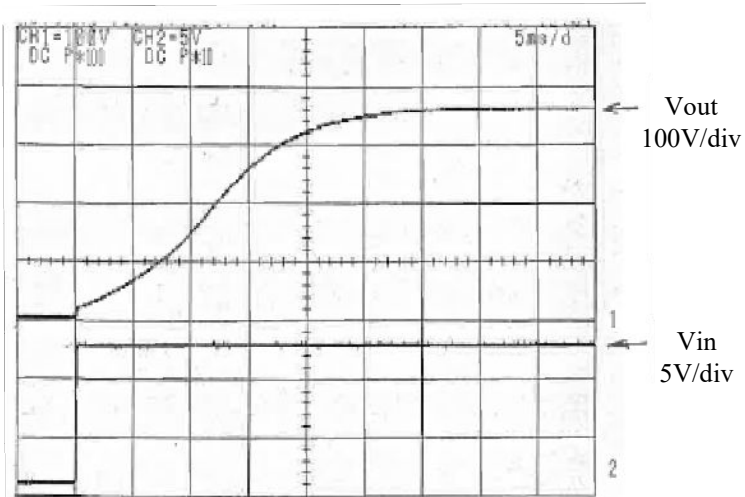
Conditions Ta : 25°C
 Vin : 12V
 Vout : 175V , 350V



5. Output Rise Time Characteristics

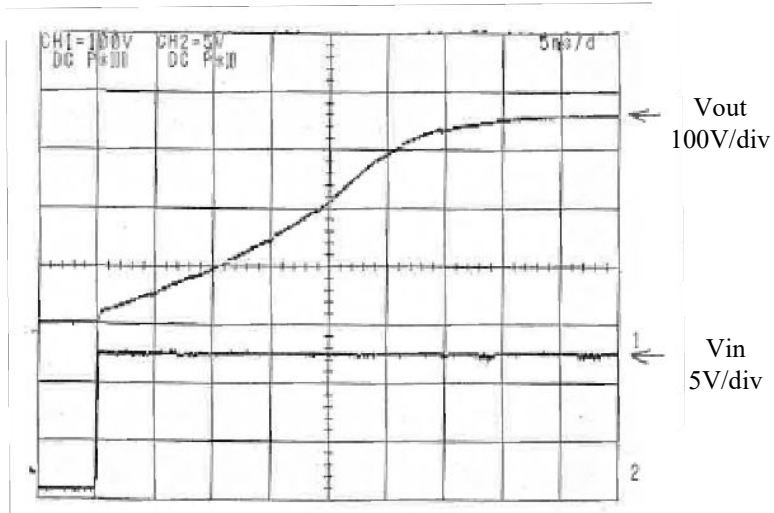
Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 350V
	Vcont	: 4V

(1) Load condition : 0.0mA



Time : 5ms/div

(2) Load condition : 7mA

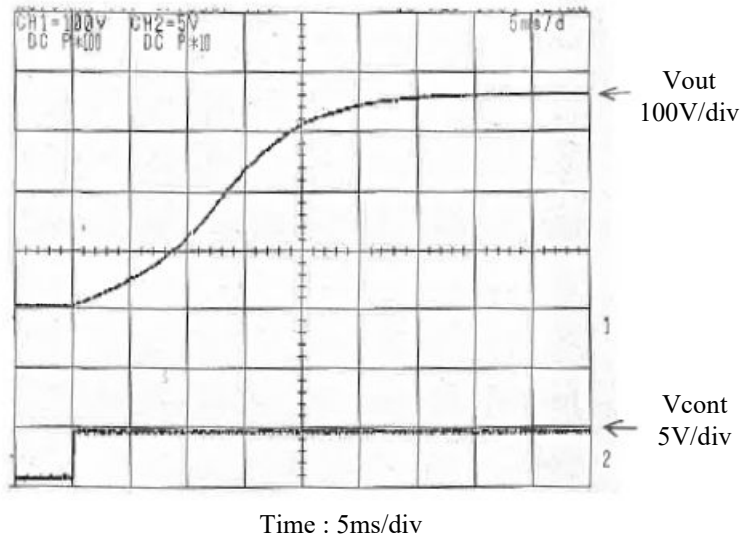


Time : 5ms/div

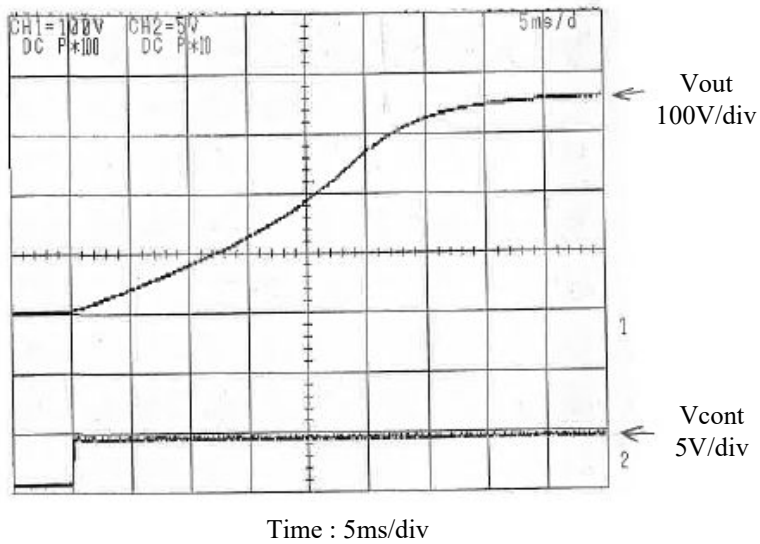
5. Output Rise Time Characteristics (with Vcont)

Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 350V
	Vcont	: 4V

(1) Load condition : 0.0mA



(2) Load condition : 7mA

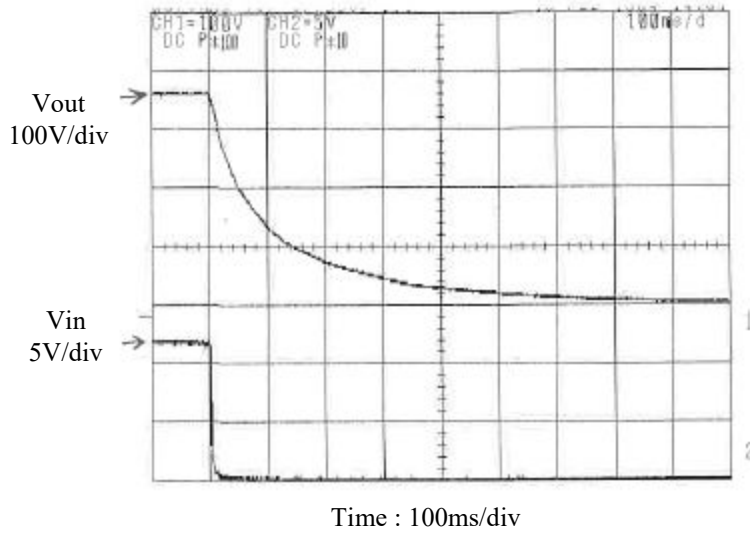


6. Output Fall Time Characteristics

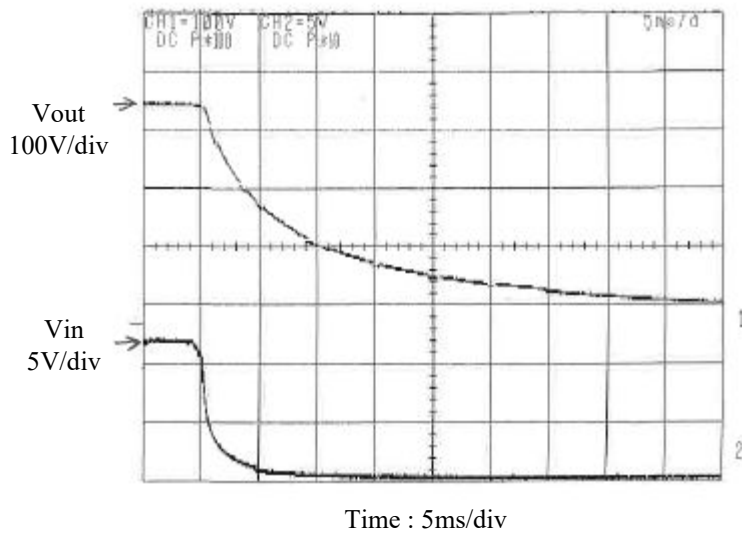
Conditions

Ta : 25°C
Vin : 12V
Vout : 350V
Vcont : 4V

(1) Load condition : 0.0mA



(2) Load condition : 7mA



7. Dynamic Load Regulation

Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 350V
	Vcont	: 4V

- (1) Load : open => 50kΩ => open
Condition : Load input & Load disconnection

