

CHVM3-12-0300PW

EVALUATION DATA

INDEX

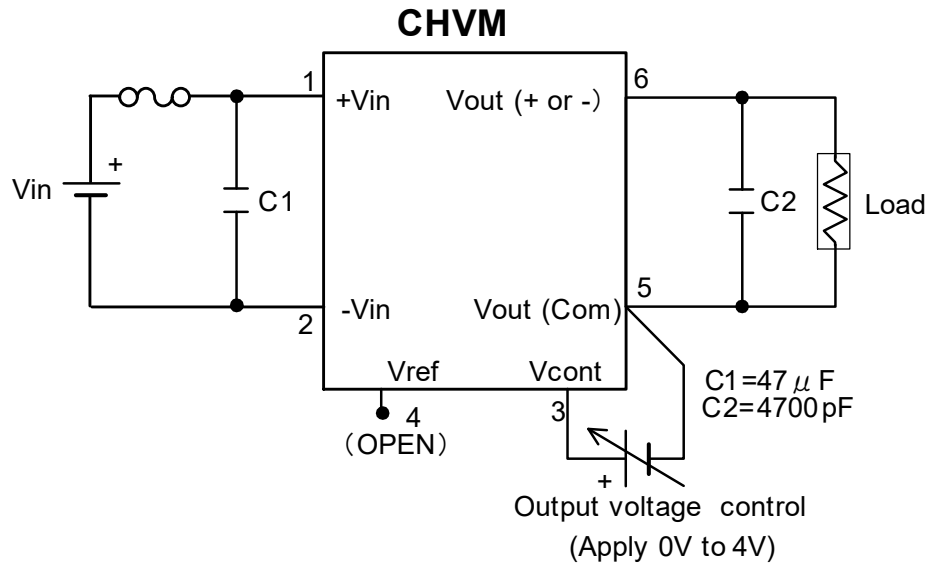
1. Test circuit·····P3
2. Steady State Characteristics·····P4,P5,P6
3. Temperature Regulation·····P7
4. Over Current Characteristics·····P8
5. Output Rise Time Characteristics·····P9,P10
6. Output Fall Time Characteristics·····P11
7. Dynamic Load Regulation·····P12

Definition

V _{in}	···Input voltage
V _{out}	···Output voltage
I _{out}	···Output current
V _{cont}	···Output voltage control
T _a	···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	299.89	30	395	299.45	45
		3.0	53	224.89	30	300	224.57	40
		2.0	43	149.88	25	206	149.67	30
		1.0	34	74.87	20	115	74.76	25
		0.0						
	12.0	4.0	65	299.88	30	395	299.45	45
		3.0	55	224.89	30	300	224.57	40
		2.0	45	149.87	25	207	149.65	30
		1.0	35	74.87	25	116	74.76	25
		0.0	23	2.50		23	0.50	
	13.2	4.0	66	299.88	30	395	299.45	45
		3.0	56	224.89	30	300	224.56	40
		2.0	46	149.87	25	208	149.65	30
	1.0	36	74.87	25	117	74.77	25	
	0.0							

	Spec	Data
Line reg.	-	0mV
Load reg.	-	430mV
Ripple/Noise	-	-

*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	56	299.82	10	385	299.41	20
		3.0	47	224.86	10	293	224.56	15
		2.0	39	149.43	5	202	149.23	10
		1.0	32	74.89	5	113	74.76	5
		0.0						
	12.0	4.0	58	299.84	10	385	299.43	20
		3.0	48	224.87	10	294	224.57	15
		2.0	40	149.43	5	203	149.23	10
		1.0	32	74.88	5	113	74.76	5
		0.0	22	2.02		22	0.43	
	13.2	4.0	58	299.86	10	385	299.45	20
		3.0	50	224.88	10	295	224.58	15
	2.0	42	149.45	5	203	149.24	10	
	1.0	33	74.87	5	115	74.77	5	
	0.0							

	Spec	Data
Line reg.	60mV typ	40mV
Load reg.	600mV typ	410mV
Ripple/Noise	-	-

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	58	300.50	35	385	300.16	45
		3.0	48	225.29	30	292	225.00	40
		2.0	39	150.27	30	202	150.10	30
		1.0	32	75.19	25	112	75.09	25
		0.0						
	12.0	4.0	59	300.51	35	385	300.16	45
		3.0	49	225.28	30	293	225.00	40
		2.0	41	150.28	30	202	150.10	30
		1.0	33	75.19	25	113	75.10	25
		0.0	22	1.67		22	0.35	
	13.2	4.0	61	300.51	35	390	300.16	45
		3.0	50	225.27	30	294	225.00	40
		2.0	42	150.28	30	203	150.10	30
		1.0	34	75.18	25	114	75.09	25
	0.0							

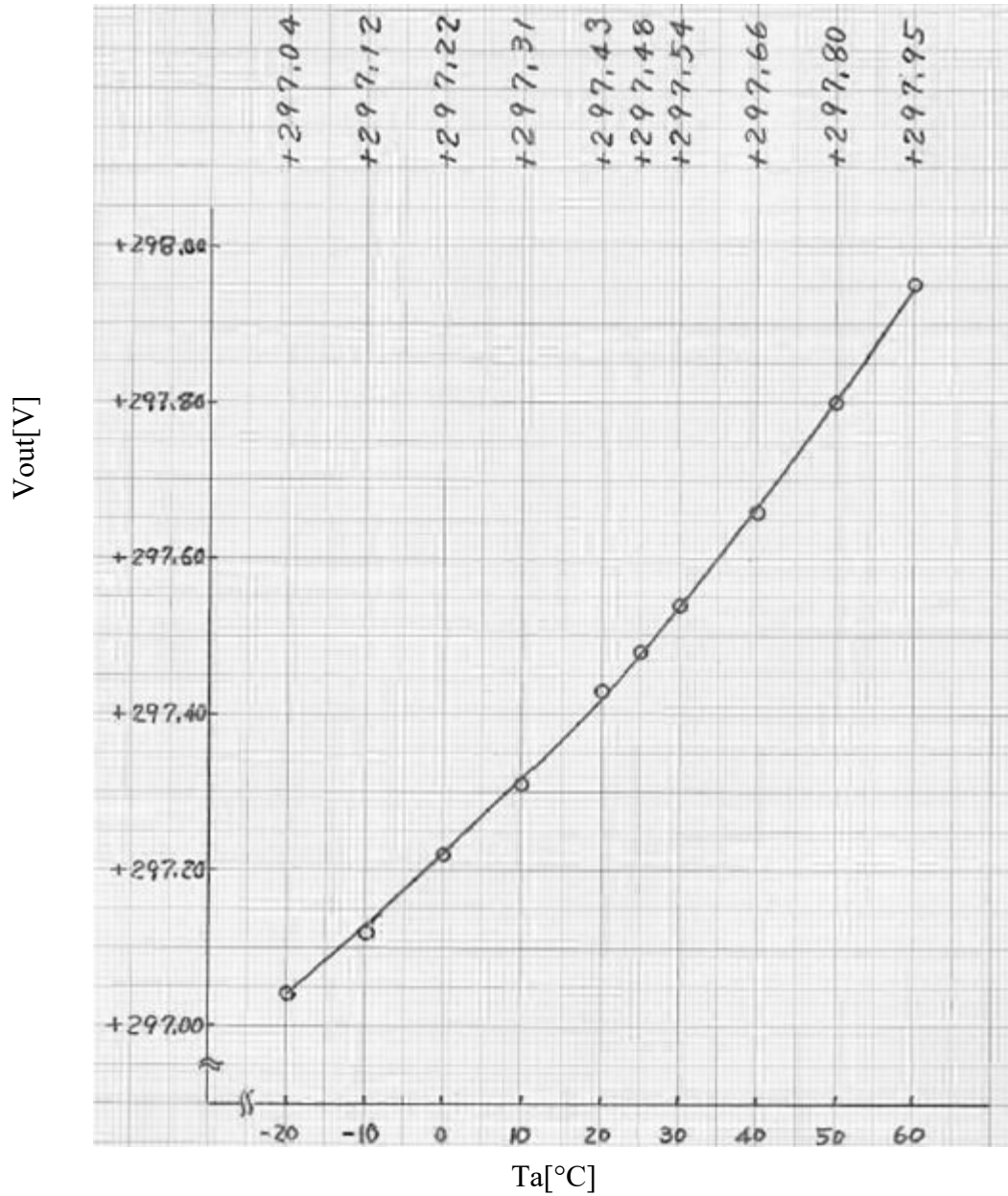
	Spec	Data
Line reg.	-	0mV
Load reg.	-	350mV
Ripple/Noise	-	-

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

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

3. Temperature Regulation

Conditions V_{in} : 12V
 $Load$: 30k Ω
 V_{cont} : 4V

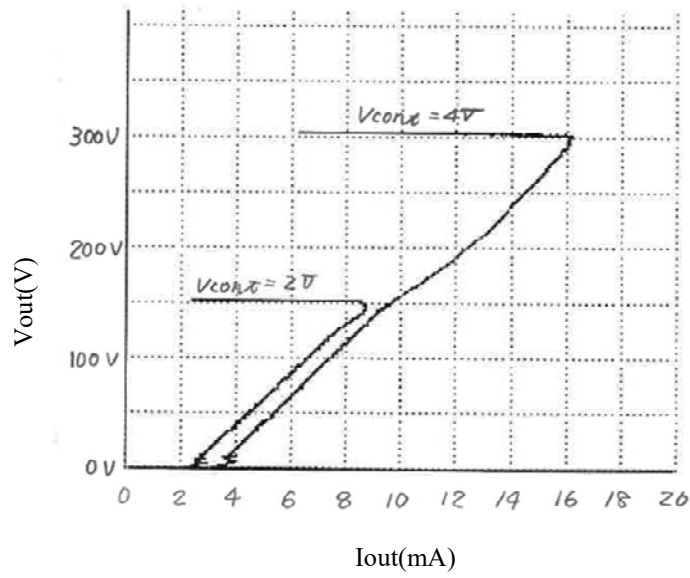


Ta [°C]	Vout [V]
-20	297.04
-10	297.12
0	297.22
10	297.31
20	297.43
30	297.54
40	297.66
50	297.80
60	297.95

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

4. Over Current Characteristics

Conditions Ta : 25°C
 Vin : 12V
 Vout : 150V , 300V

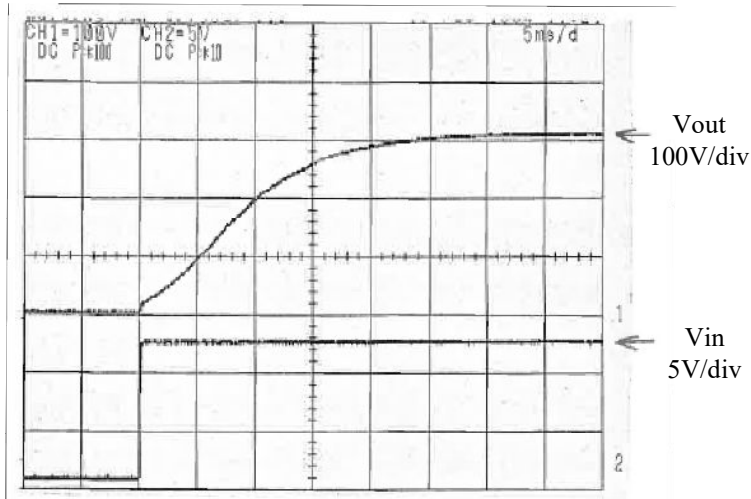


5. Output Rise Time Characteristics

Conditions

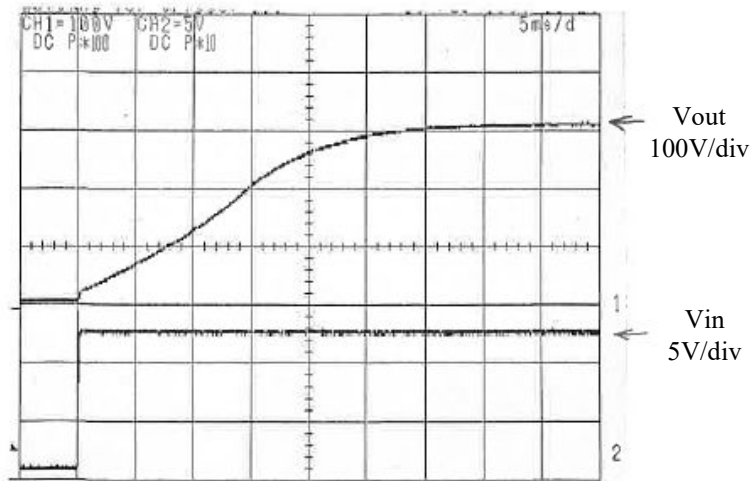
Ta : 25°C
Vin : 12V
Vout : 300V
Vcont : 4V

(1) Load condition : 0.0mA



Time : 5ms/div

(2) Load condition : 10mA

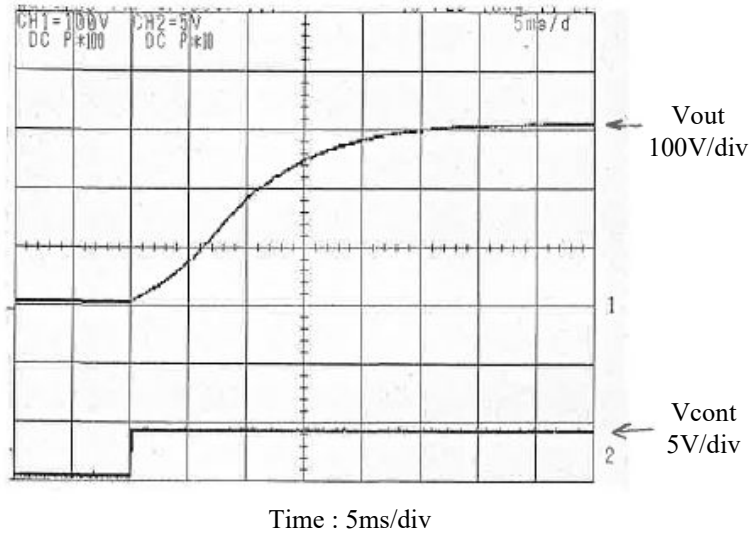


Time : 5ms/div

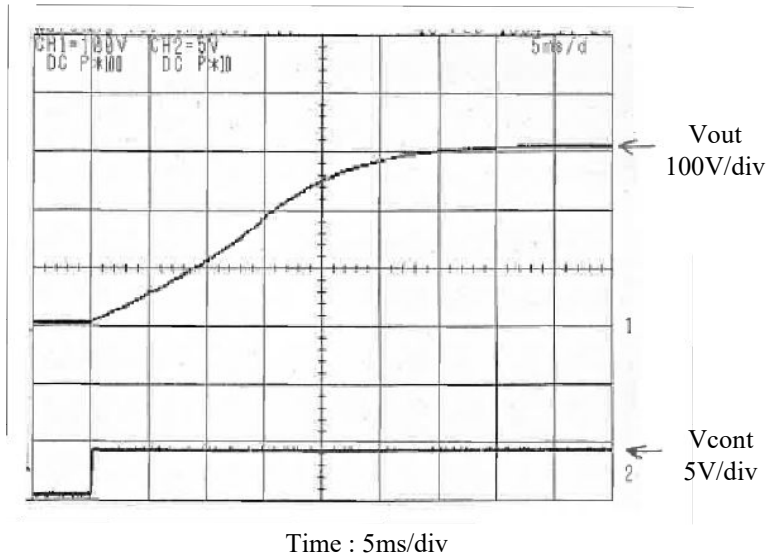
5. Output Rise Time Characteristics (with Vcont)

Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 300V
	Vcont	: 4V

(1) Load condition : 0.0mA



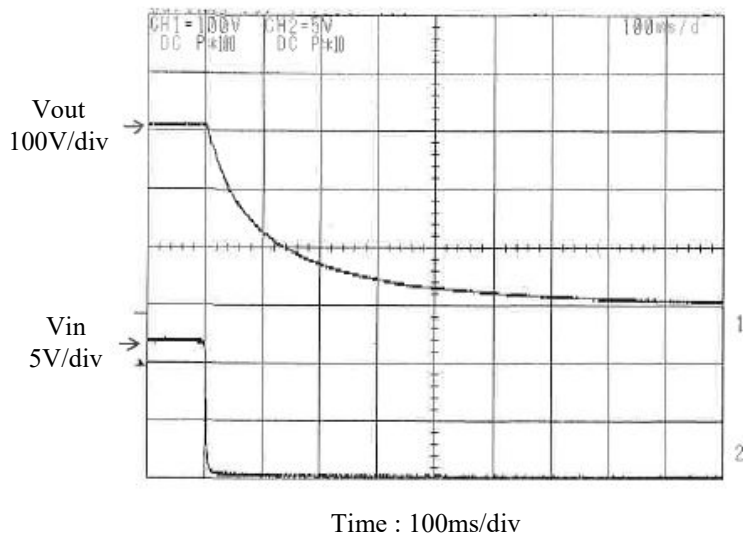
(2) Load condition : 10mA



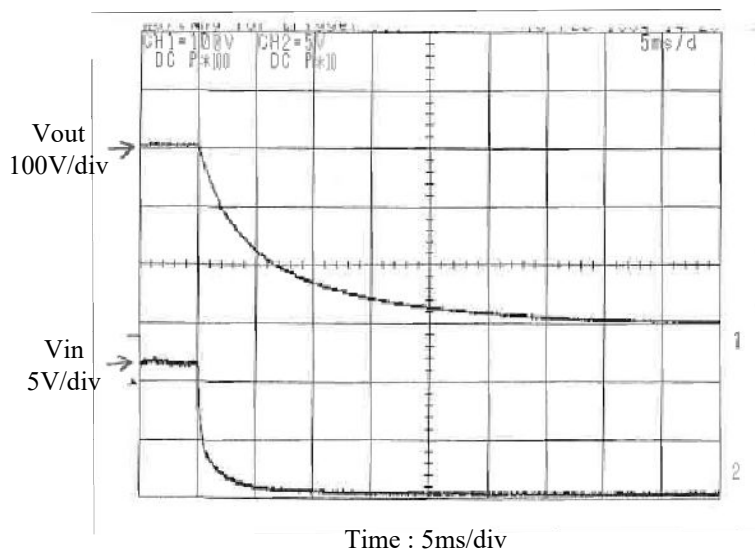
6. Output Fall Time Characteristics

Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 300V
	Vcont	: 4V

(1) Load condition : 0.0mA



(2) Load condition : 10mA



7. Dynamic Load Regulation

Conditions

Ta : 25°C
Vin : 12V
Vout : 300V
Vcont : 4V

(1) Load : open => 30kΩ => open

Condition : Load input & Load disconnection

