

CHVM2R7-12-0180PW

EVALUATION DATA

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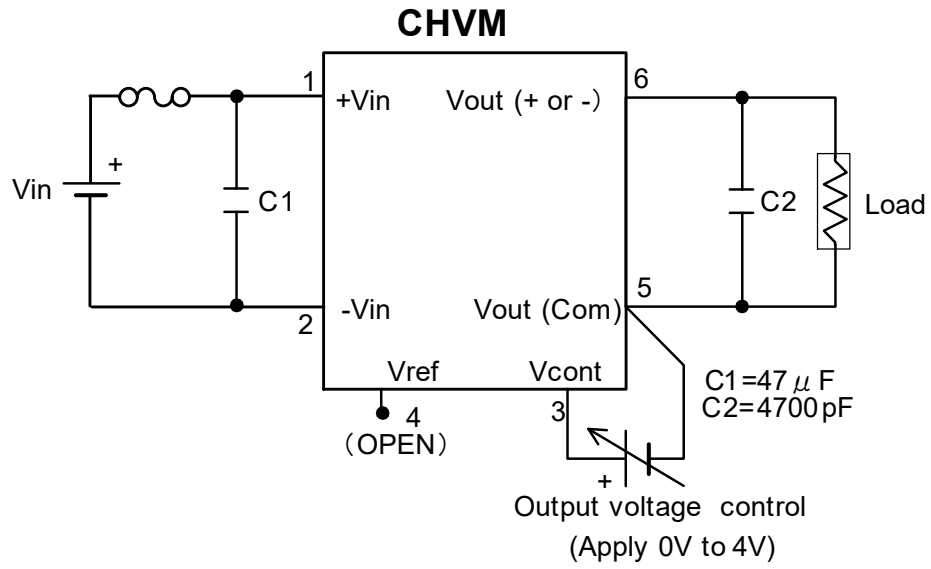
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Definition

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	56	180.05	25	358	179.27	30
		3.0	47	135.01	20	270	134.44	30
		2.0	39	90.21	20	187	89.83	25
		1.0	32	44.97	20	105	44.77	20
	12.0	4.0	56	180.04	25	358	179.27	30
		3.0	49	135.01	20	272	134.44	30
		2.0	40	90.21	20	188	89.83	25
		1.0	33	44.97	20	106	44.78	20
	13.2	4.0	57	180.04	25	358	179.28	30
		3.0	50	135.00	20	273	134.43	30
		2.0	41	90.21	20	190	89.83	25
		1.0	34	44.96	20	107	44.78	20

	Spec	Data
Line reg.	-	10mV
Load reg.	-	770mV
Ripple/Noise	-	30mV 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	47	179.63	5	350	178.96	15
		3.0	41	134.69	5	264	134.17	10
		2.0	35	89.72	5	182	89.38	8
		1.0	29	44.89	5	102	44.71	5
	12.0	4.0	49	179.64	5	350	178.97	15
		3.0	42	134.69	5	265	134.18	10
		2.0	36	89.72	5	183	89.38	8
		1.0	30	44.88	5	103	44.71	5
	13.2	4.0	50	179.66	5	350	178.97	15
		3.0	43	134.70	5	266	134.19	10
		2.0	37	89.73	5	184	89.38	8
		1.0	32	44.88	5	105	44.71	5

	Spec	Data
Line reg.	108mV max	10mV
Load reg.	2700mV max	670mV
Ripple/Noise	100mV p-p max	15mV 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	51	179.38	20	345	178.75	30
		3.0	43	134.65	20	263	134.18	30
		2.0	36	89.77	20	182	89.45	25
		1.0	30	44.88	15	102	44.72	20
	12.0	4.0	53	179.37	20	350	178.75	30
		3.0	44	134.65	20	264	134.18	30
		2.0	38	89.77	20	183	89.45	25
		1.0	32	44.88	15	103	44.72	20
	13.2	4.0	53	179.37	20	350	178.74	30
		3.0	46	134.65	20	265	134.17	30
		2.0	38	89.76	20	184	89.45	25
		1.0	33	44.88	15	104	44.72	20

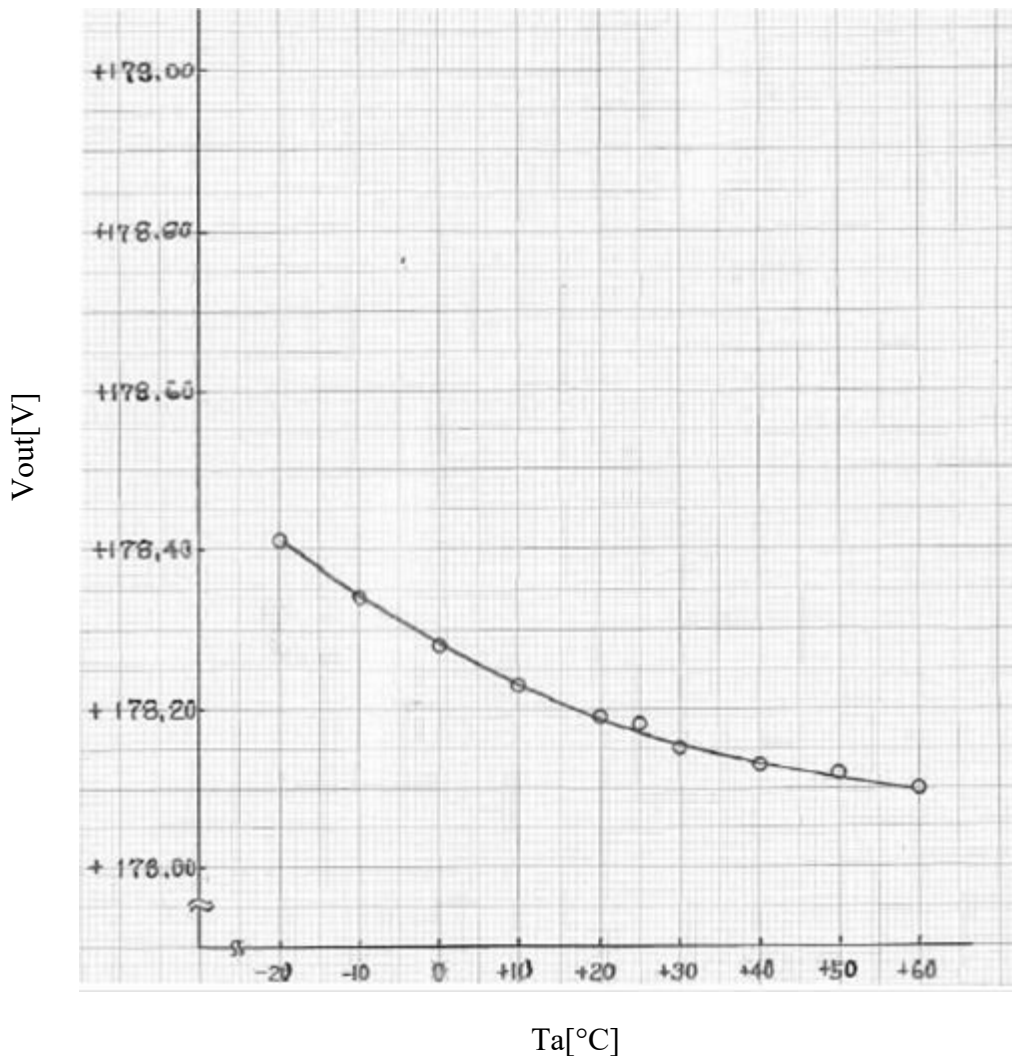
	Spec	Data
Line reg.	-	10mV
Load reg.	-	620mV
Ripple/Noise	-	30mV p-p

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

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

3. Temperature Regulation

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

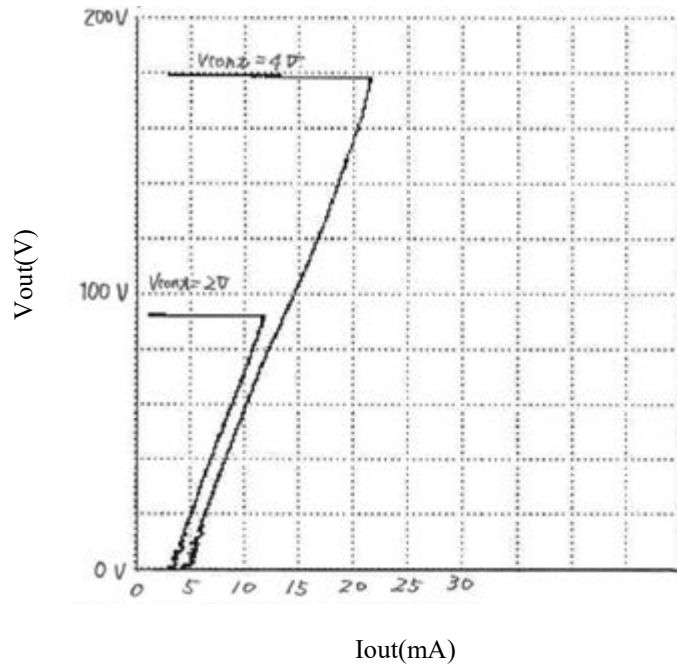


Ta [°C]	Vout [V]
-20	178.41
-10	178.34
0	178.28
10	178.23
20	178.19
30	178.15
40	178.13
50	178.12
60	178.10

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

4. Over Current Characteristics

Conditions Ta : 25°C
 Vin : 12V
 Vout : 90V , 180V

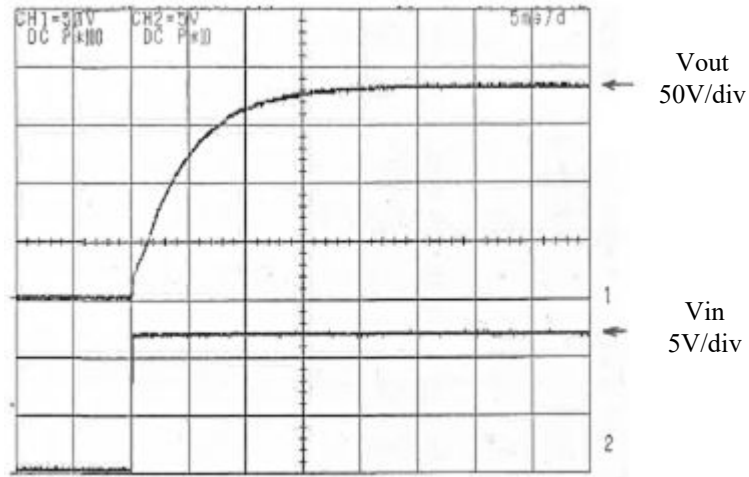


5. Output Rise Time Characteristics

Conditions

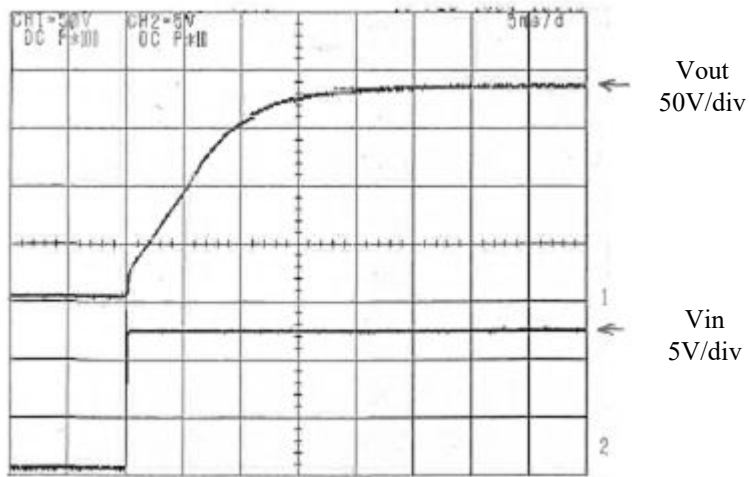
Ta : 25°C
Vin : 12V
Vout : 180V
Vcont : 4V

(1) Load condition : 0.0mA



Time : 5ms/div

(2) Load condition : 15mA

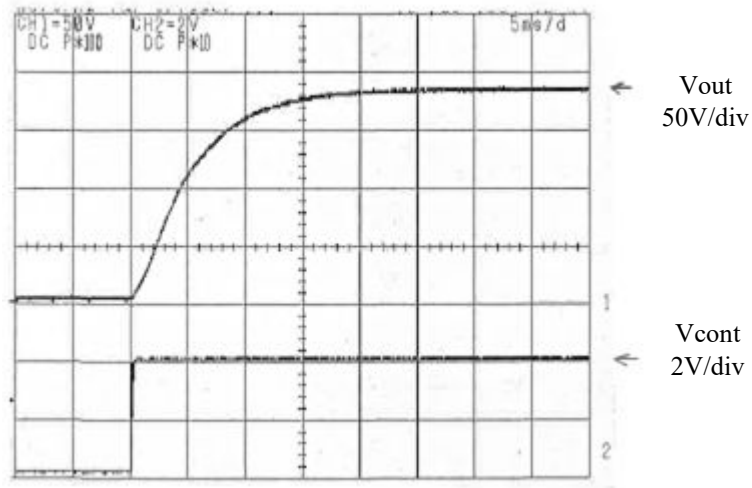


Time : 5ms/div

5. Output Rise Time Characteristics (with Vcont)

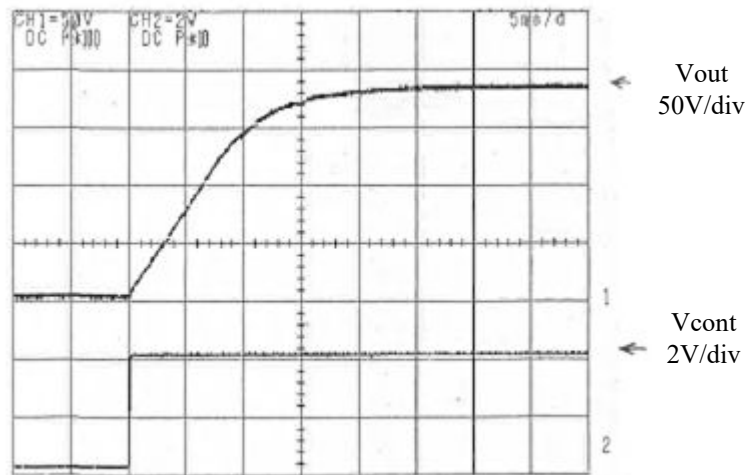
Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 180V
	Vcont	: 4V

(1) Load condition : 0.0mA



Time : 5ms/div

(2) Load condition : 15mA

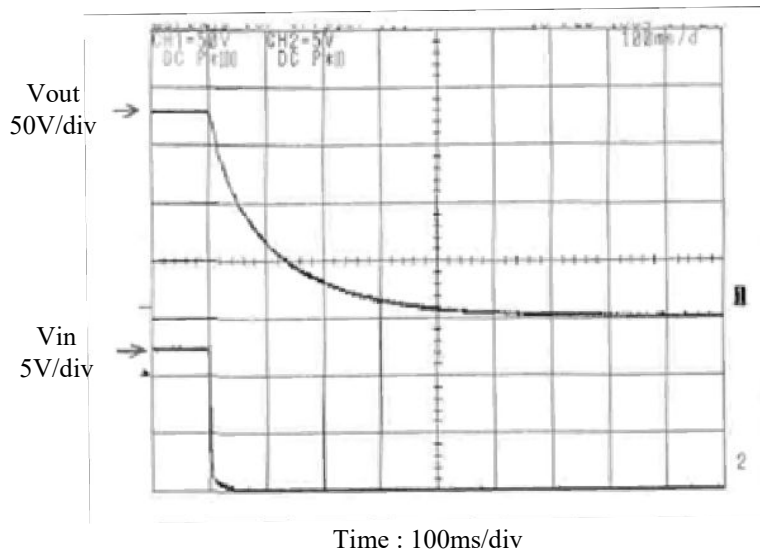


Time : 5ms/div

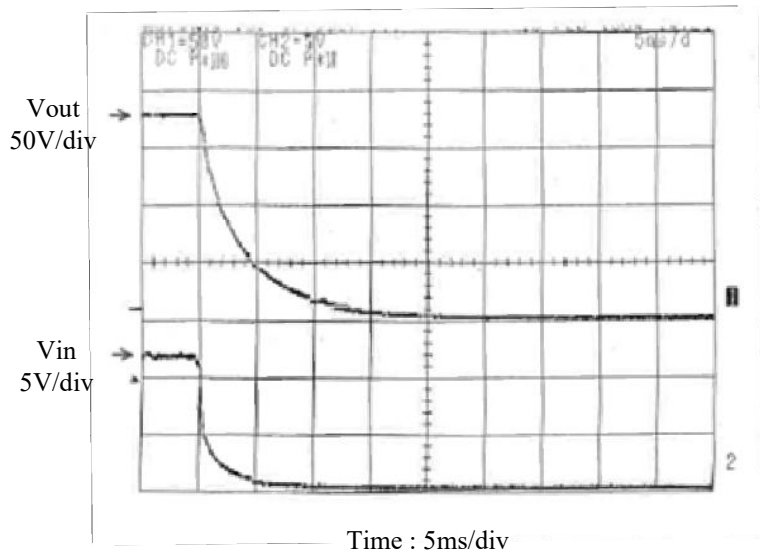
6. Output Fall Time Characteristics

Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 180V
	Vcont	: 4V

(1) Load condition : 0.0mA



(2) Load condition : 15mA



7. Dynamic Load Regulation

Conditions	Ta	: 25°C
	Vin	: 12V
	Vout	: 180V
	Vcont	: 4V

- (1) Load : open => 12kΩ => open
Condition : Load input & Load disconnection

