CN100B110

SPECIFICATIONS

CA952-01-01/100

ITEMS	MODEL		CN100B110 -5	CN100B110 -12	CN100B110 -15	CN100B110 -24	CN100B110 -48
INPUT							
Input Voltage Range (*7)	VDC		43 - 160				
Efficiency (Typ.) (*1)	%		91.0	92.0	91.5	90.5	90.5
Input Current (Typ.) (*1)	A		1.01	1.01	1.01	1.02	1.02
OUTPUT							
Nominal Output Voltage	VDC		5	12	15	24	48
Output Voltage Accuracy (*1)	%		-/+ 1				
Maximum Output Current	A		20	8.4	6.7	4.2	2.1
Maximum Output Power	W		100	100.8	100.5	100.8	100.8
Maximum Line Regulation (*2)(*8)	mV		10	24	30	48	96
Maximum Load Regulation (*3)(*8)	mV		10	24	30	48	96
Temperature Coefficient	-		0.02%/°C				
Maximum Ripple & Noise (*8)	mVp-p		100	150	150	240	480
Output Voltage Range (*8)	VDC		4 - 6	9.6 - 14.4	12 - 18	19.2 - 28.8	38.4 - 57.6
Over Current Protection (*4)	%		102 - 150				
Over Voltage Protection (*5)(*7)	%		125 - 145				
FUNCTION							
Remote ON/OFF Control (*7)	-		Possible				
Remote Sensing (*7)	-		Possible				
Parallel Operation (*7)	-		-				
Series Operation (*7)	-		Possible				
ENVIRONMENT							
Operating Temperature (*6)(*7)	-		-40°C - +100°C (Baseplate)				
Storage Temperature	-		-40°C - +100°C				
Operating Humidity	-		5 - 95%RH (No Condensing)				
Storage Humidity	-		5 - 95%RH (No Condensing)				
Vibration	-		At No Operating, 10 - 55Hz (Sweep for 1min.) Amplitude 0.825mm Constant (Maximum 49.0m/s^2) X,Y,Z 1 hour each IEC61373-Category 1-Grade B				
Shock	-		196.1m/s^2				
Cooling	-		Conduction Cooled				
ISOLATION							
Withstand Voltage (*9)	-		Input-Baseplate : 2.5kVAC for 1min (20mA), Input-Output: 3.0kVAC for 1min (20mA). Output-Baseplate: 500VAC for 1min (20mA)				
Isolation Resistance	-		More than 100MΩ at 25°C and 70%RH Output-Baseplate…500VDC				
STANDARD AND COMPLIANCE							
Safety	-		IEC/EN/UL/CSA62368-1 approval is in progressing.				
MECHANICAL							
Weight (Typ.)	g		60				
Size (W x H x D)	mm		37.5 x 12.7 x 58.3 (Refer to Outline Drawing)				

*Read Instruction Manual carefully, before using the power supply unit.

=NOTES=

*1. At 110VDC and maximum output current.
   (Baseplate Temperature = +25°C)
*2. 43 - 160VDC, Constant load.
*3. No Load - Full Load, Constant input voltage.
*4. Constant current limiting before LVP trigger.
   Delay hiccup when left in OCP condition with the output voltage
   less than LVP level. Refer to Instruction Manual.)

*5. Automatic recovery.
*6. Ratings - Refer to Derating Curve (CA952-01-03/100_).
   - Load(%) is percent of maximum output current.
*7. Refer to Instruction Manual.
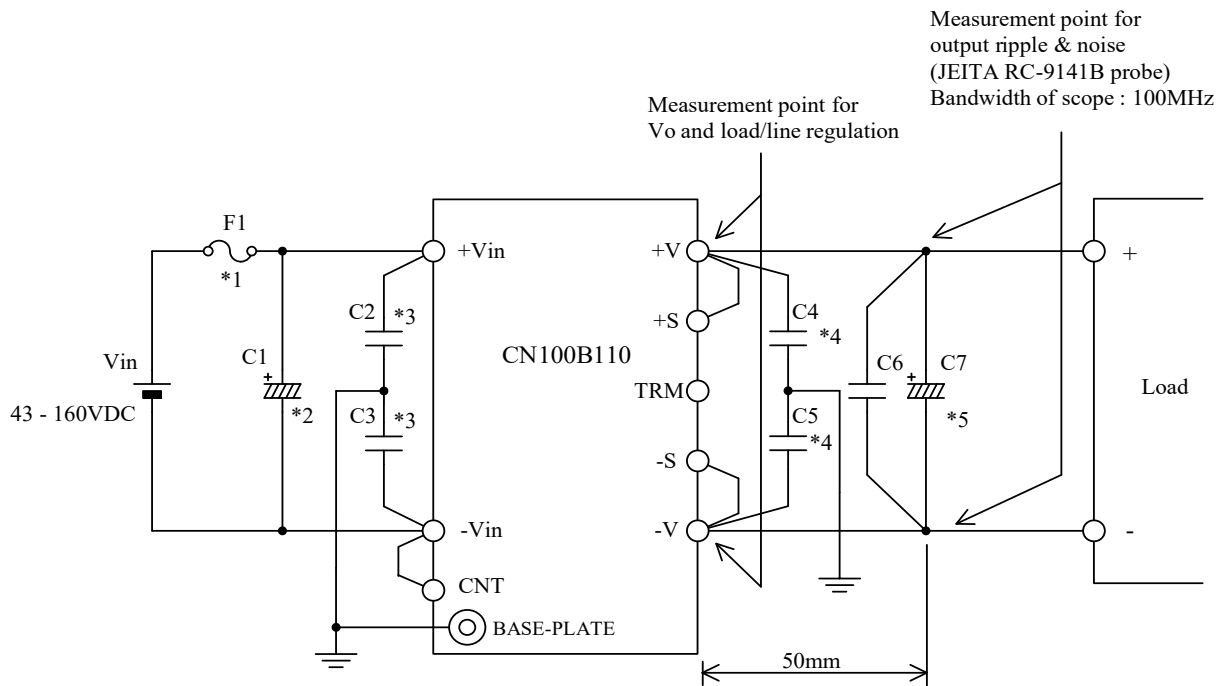*8. External components are necessary for operation.
   (Refer to Basic Connection and Instruction Manual.)
*9. This specification applies to power supply module as stand-alone.

CN100B110

CA952-01-02/100

BASIC CONNECTION

Measurement point for
output ripple & noise
(JEITA RC-9141B probe)
Bandwidth of scope : 100MHz

Measurement point for
Vo and load/line regulation

External Components list

F1:	10A				
C1:	100uF (Elec. Cap.)		5V	1000uF	(Solid Cap.)
C2:	4700pF (Ceramic Cap.)	C7:	12V	680uF	(Solid Cap.)
C3:	4700pF (Ceramic Cap.)		15V	680uF	(Solid Cap.)
C4:	0.022uF (Film. Cap.)		24V	220uF	(Elec. Cap.)
C5:	0.022uF (Film. Cap.)		48V	220uF x2 Series	(Elec. Cap.)
C6:	2.2uF (Ceramic Cap.)				

*Read instruction manual carefully, before using the power supply unit.

==NOTES==

*1. Use an external fuse (fast blow type or normal blow type) for each unit.

*2. Put input capacitor.

1) Use low impedance electrolytic capacitor with excellent temperature characteristics.

2) Use two capacitors in parallel when ambient temperature is -20°C or lower to reduce ESR.

3) If the impedance of input line is high, C1 capacitance must be more than above.

*3. Put FG capacitor.

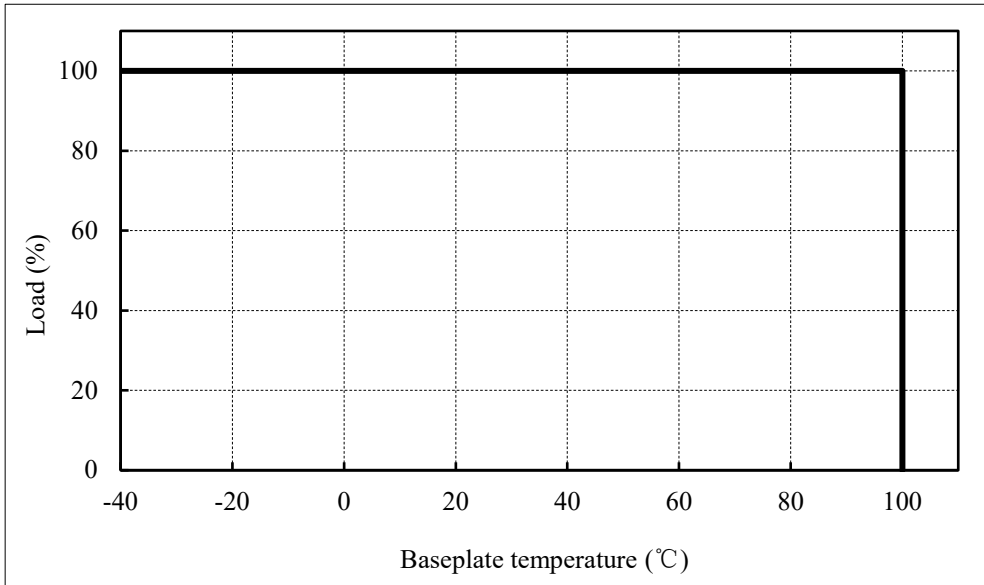Put these capacitors as close as possible to Vin and BASE-PLATE.

*4. Put FG capacitor.

Put these capacitors as close as possible to Vo and BASE-PLATE.

*5. Put output capacitor.

1) Use low impedance electrolytic capacitor with excellent temperature characteristics.

2) Use more than twice recommended capacitor above in parallel for 24V and 48V when ambient temperature
is -20°C or lower to reduce ESR.

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DERATING CURVE :

Derating Curve: Tb V.S Load

Output Voltage Trim up Range Limited v.s Input Voltage