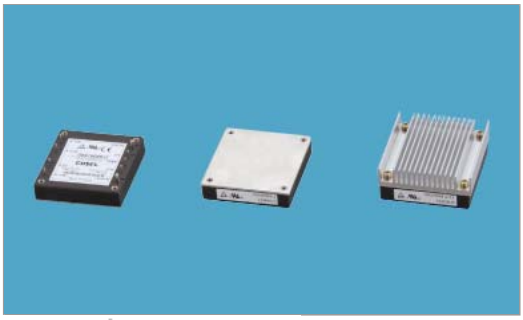
CBS10024



Features

- Compact DC-DC Converter, "HALF BRICK" which has been standard size for Telecommunication Market
- High effeciency
- High density
- High reliability : not built-in aluminum and tantalum electrolytic capacitor
- Built-in Remote ON/OFF
- Mounting hole (M3 tapped)
- RoHS Compliant

Safety Agency Approvals

UL60950, C-UL (CSA60950) recognized, TUV approved

CE Markings

Low Voltage Directive

5 year warranty(refer to Instruction Manual)

Model	Input Voltage [V]	Output Wattage [W]	DC Output [V/A]
CBS100241R8	DC 18 - 36	42.12	1.8V 23.4A
CBS100242R5	DC 18 - 38	58.5	2.5V 23.4A
CBS1002403	DC 18 - 36	77.2	3.3V 23.4A
CBS1002405	DC 18 - 36	100	5V 20A
CBS1002412	DC 18 - 36	100.8	12V 8.4A
CBS1002415	DC 18 - 36	100.5	15V 6.7A
CBS1002424	DC 18 - 36	100.8	24V 4.2A
CBS1002428	DC 18 - 36	100.8	28V 3.6A

COSEL **Power module type**

CBS100

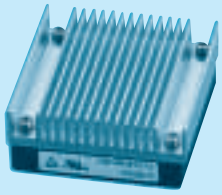
Ordering information

CB	S	100	48	12	-□
①	②	③	④	⑤	⑧

(LVD)

RoHS





①Series name
②Single output
③Output wattage
④Input voltage
24:DC18 - 36V
48:DC36 - 76V
⑤Output voltage
⑧Optional
R :with Remote ON/OFF Positive logic control
T :with Mounting hole ϕ3.4 thru
F□:with Addition of a Heat sink

MODEL	CBS100241R8	CBS100242R5	CBS1002403	CBS1002405	CBS1002412	CBS1002415	CBS1002424	CBS1002428
MAX OUTPUT WATTAGE[W]	42.12	58.50	77.2	100.0	100.8	100.5	100.8	100.8
DC OUTPUT	1.8V 23.4A	2.5V 23.4A	3.3V 23.4A	5V 20A	12V 8.4A	15V 6.7A	24V 4.2A	28V 3.6A

SPECIFICATIONS

	MODEL		CBS100241R8	CBS100242R5	CBS1002403	CBS1002405	CBS1002412	CBS1002415	CBS1002424	CBS1002428
INPUT	VOLTAGE[V]		DC18 - 36							
	CURRENT[A]	*1	2.47typ	3.17typ	4.07typ	5.02typ	4.77typ	4.81typ	4.83typ	4.83typ
	EFFICIENCY[%]	*1	71typ	77typ	79typ	83typ	88typ	87typ	87typ	87typ
OUTPUT	VOLTAGE[V]		1.8	2.5	3.3	5	12	15	24	28
	CURRENT[A]		23.4	23.4	23.4	20	8.4	6.7	4.2	3.6
	LINE REGULATION[mV]		10max	10max	10max	10max	24max	30max	48max	56max
	LOAD REGULATION[mV]		10max	10max	10max	10max	24max	30max	48max	56max
	RIPPLE[mVp-p]	-20 to +100℃ *2	80max	80max	80max	80max	120max	120max	120max	120max
		-40 to -20℃ *2	120max	120max	120max	120max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +100℃ *2	120max	120max	120max	120max	150max	150max	150max	150max
		-40 to -20℃ *2	200max	200max	200max	200max	200max	200max	250max	250max
	TEMPERATURE REGULATION[mV]	0 to +65℃	35max	35max	35max	50max	120max	150max	240max	280max
		-40 to +100℃	66max	66max	66max	100max	240max	300max	480max	560max
	DRIFT[mV]	*3	16max	16max	16max	20max	40max	60max	90max	90max
	START-UP TIME[ms]		200max (DCIN 24V, Io=100%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	*4	Fixed (TRM pin open), adjustable by external resistor							
			1.70 - 1.98	1.98 - 2.75	1.98 - 3.63	3.0 - 5.5	7.2 - 13.2	9.0 - 16.5	14.4 - 26.4	16.8 - 30.8
	OUTPUT VOLTAGE SETTING[V]		1.77 - 1.88	2.46 - 2.61	3.25 - 3.45	4.90 - 5.20	11.74 - 12.46	14.55 - 15.45	23.28 - 24.72	27.16 - 28.84
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically							
	OVERVOLTAGE PROTECTION[V]		2.16 - 2.88	3.00 - 4.00	4.00 - 5.50	5.75 - 7.00	13.80 - 16.80	17.25 - 21.00	27.60 - 33.60	32.20 - 39.20
	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided (Negative logic L : ON, H : OFF)							

MODEL	CBS100481R8	CBS100482R5	CBS1004803	CBS1004805	CBS1004812	CBS1004815	CBS1004824	CBS1004828
MAX OUTPUT WATTAGE[W]	42.12	58.50	77.2	100.0	100.8	100.5	100.8	100.8
DC OUTPUT	1.8V 23.4A	2.5V 23.4A	3.3V 23.4A	5V 20A	12V 8.4A	15V 6.7A	24V 4.2A	28V 3.6A

SPECIFICATIONS

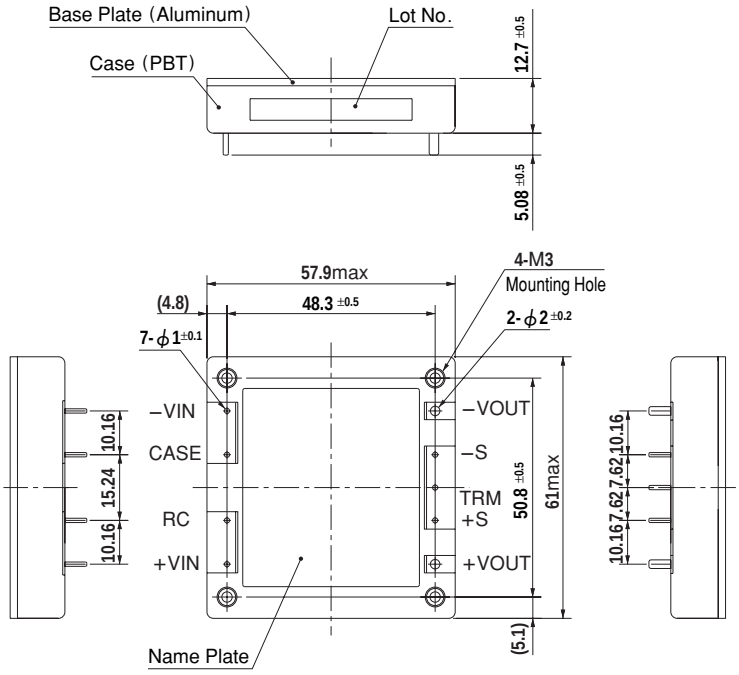
	MODEL		CBS100481R8	CBS100482R5	CBS1004803	CBS1004805	CBS1004812	CBS1004815	CBS1004824	CBS1004828
INPUT	VOLTAGE[V]		DC36 - 76							
	CURRENT[A]	*1	1.24typ	1.58typ	2.01typ	2.48typ	2.36typ	2.38typ	2.39typ	2.39typ
	EFFICIENCY[%]	*1	71typ	77typ	80typ	84typ	89typ	88typ	88typ	88typ
OUTPUT	VOLTAGE[V]		1.8	2.5	3.3	5	12	15	24	28
	CURRENT[A]		23.4	23.4	23.4	20	8.4	6.7	4.2	3.6
	LINE REGULATION[mV]		10max	10max	10max	10max	24max	30max	48max	56max
	LOAD REGULATION[mV]		10max	10max	10max	10max	24max	30max	48max	56max
	RIPPLE[mVp-p]	-20 to +100℃ *2	80max	80max	80max	80max	120max	120max	120max	120max
		-40 to -20℃ *2	120max	120max	120max	120max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +100℃ *2	120max	120max	120max	120max	150max	150max	150max	150max
		-40 to -20℃ *2	200max	200max	200max	200max	200max	200max	250max	250max
	TEMPERATURE REGULATION[mV]	0 to +65℃	35max	35max	35max	50max	120max	150max	240max	280max
		-40 to +100℃	66max	66max	66max	100max	240max	300max	480max	560max
	DRIFT[mV]	*3	16max	16max	16max	20max	40max	60max	90max	90max
	START-UP TIME[ms]		200max (DCIN 48V, Io=100%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	*4	Fixed (TRM pin open), adjustable by external resistor							
			1.70 - 1.98	1.98 -2.75	1.98 - 3.63	3.0 - 5.5	7.2 - 13.2	9.0 - 16.5	14.4 - 26.4	16.8 - 30.8
	OUTPUT VOLTAGE SETTING[V]		1.77 - 1.88	2.46 -2.61	3.25 - 3.45	4.90 - 5.20	11.74 - 12.46	14.55 - 15.45	23.28 - 24.72	27.16 - 28.84
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically							
	OVERVOLTAGE PROTECTION[V]		2.16 - 2.88	3.00 - 4.00	4.00 - 5.50	5.75 - 7.00	13.80 - 16.80	17.25 - 21.00	27.60 - 33.60	32.20 - 39.20
	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided (Negative logic L : ON, H : OFF)							

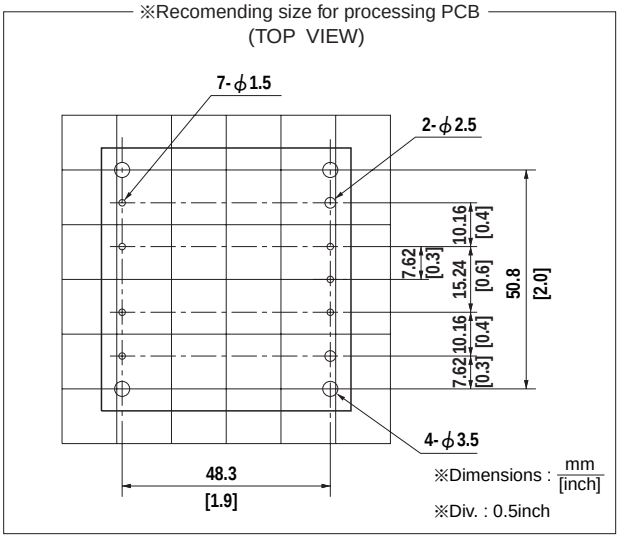
GENERAL SPECIFICATIONS

ISOLATION	INPUT-OUTPUT	DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15℃)
	INPUT-CASE PIN, BASE PLATE	DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15℃)
	OUTPUT-CASE PIN, BASE PLATE	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-40 to +100℃ (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +100℃, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max
	VIBRATION	10 - 55Hz, 49.0m/s² (5G), 3minutes period, 60minutes each along X, Y and Z axis
	IMPACT	196.1m/s² (20G), 11ms, once each along X, Y and Z axis
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1
OTHERS	CASE SIZE/WEIGHT	57.9×12.7×61.0mm (W×H×D) / 83g max
	COOLING METHOD	Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)

*1 At rated input(DC24V,DC48V) and rated load.
*2 Ripple and ripple noise is measured by using measuring board with recommended capacitor Co & the film capacitor 0.1μF.
Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101).
*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
*4 When the input voltage is in the range of DC18 - 20V, DC36 - 40V output voltage adjustment range is 60 - 105% (except for 1R8/2R5).

External view

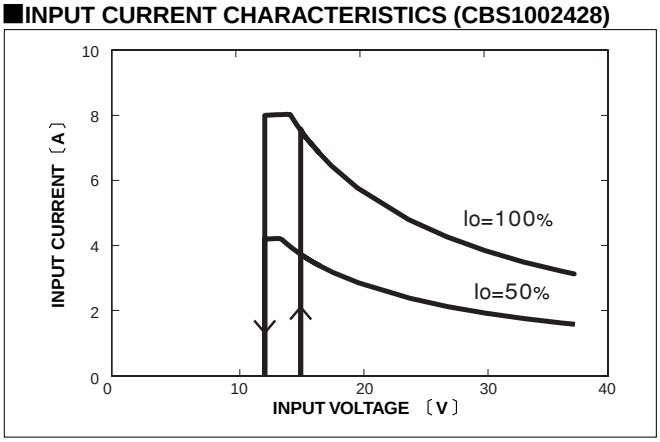




※Weight : 83g or less
※Tolerance : ±0.3
※Case : PBT
※Base Plate: Aluminum
※Dimensions in mm.
※Mounting hole screwing torque
: 0.4N•m(5.0kgf•cm)max

Performance data

■INPUT CURRENT CHARACTERISTICS (CBS1002428)



■INPUT CURRENT CHARACTERISTICS (CBS1004828)

