COSEL DC-DC Converters Power Module type

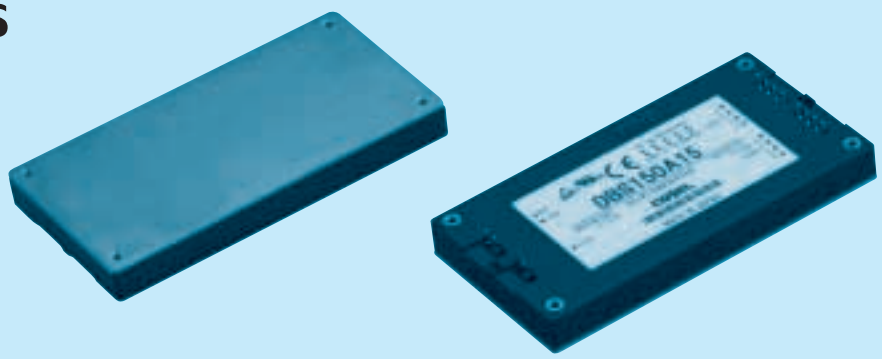
DBS100A/DBS150A

Ordering information

DB	S	150	A	15	
①	②	③	④	⑤	

①Series name
②Single output
③Output wattage
④Input voltage
A :DC110V input
⑤Output voltage

RoHS



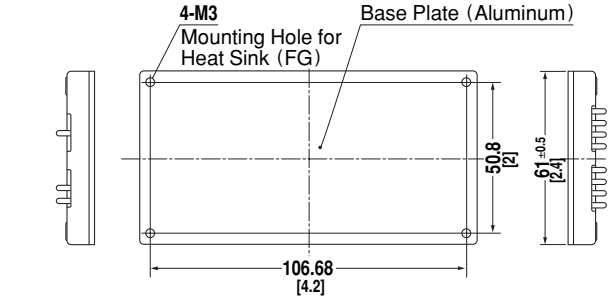
MODEL	DBS100A05	DBS100A13R8	DBS150A12	DBS150A15	DBS150A24
MAX OUTPUT WATTAGE[W]	100	100.7	150	150	151
DC OUTPUT	5V 20A	13.8V 7.3A	12V 12.5A	15V 10A	24V 6.3A

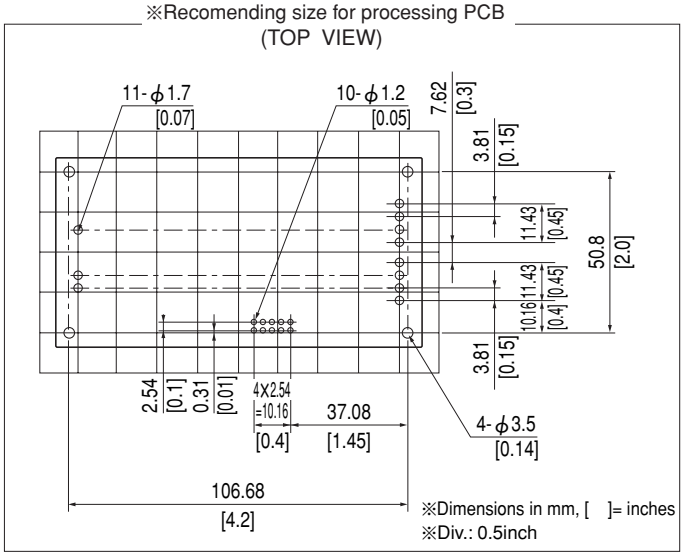
SPECIFICATIONS

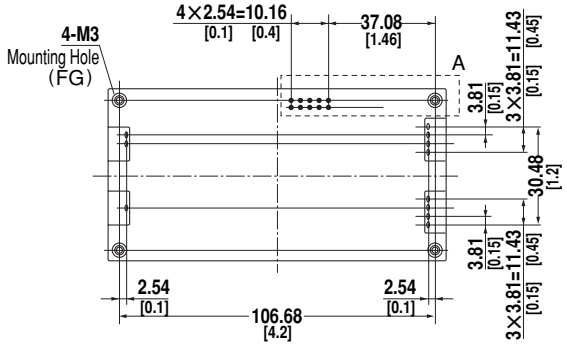
	MODEL		DBS100A05	DBS100A13R8	DBS150A12	DBS150A15	DBS150A24
INPUT	VOLTAGE[V]		DC45 - 160		DC66 - 160		
	CURRENT[A]	※1	1.11typ	1.10typ	1.57typ	1.59typ	1.58typ
	EFFICIENCY[%]	※1	82typ	83typ	87typ	86typ	87typ
OUTPUT	VOLTAGE[V]		5	13.8	12	15	24
	CURRENT[A]		20	7.3	12.5	10	6.3
	LINE REGULATION[mV]		20max	60max	40max	60max	95max
	LOAD REGULATION[mV]		40max	150max	100max	150max	190max
	RIPPLE[mVp-p]	0 to +85℃ ※2	80max	120max	120max	120max	120max
		-20 - 0℃ ※2	140max	160max	160max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +85℃ ※2	100max	150max	150max	150max	150max
		-20 - 0℃ ※2	150max	180max	180max	180max	180max
	TEMPERATURE REGULATION[mV]	0 to +65℃	50max	180max	120max	180max	280max
		-20 to +85℃	85max	310max	200max	310max	480max
	DRIFT[mV]	※3	20max	60max	40max	60max	90max
	START-UP TIME[ms]		200max (DCIN 110V, Io=100%)				
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage				
	OUTPUT VOLTAGE SETTING[V]		4.90 - 5.20	13.25 - 14.35	11.60 - 12.60	14.40 - 15.60	23.04 - 24.96
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION		5.75 - 7.00V	15.87 - 19.32V	13.80 - 16.80V	17.25 - 21.00V	27.60 - 33.60V
	REMOTE SENSING		Provided				
	REMOTE ON/OFF		Provided (On both side of input and output)				
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)				
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)				
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)				
	OUTPUT-RC2,RC3		AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15℃)				
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	※4	-20 to +85℃ (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 +85℃, 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		61×12.7×116.8mm [2.4×0.5×4.6 inches] (W×H×D) / 150g max				
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)				

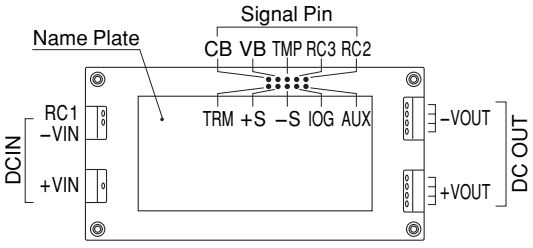
※1 At rated input(DC110V) and rated load.
※2 Ripple and ripple noise is measured by using measuring board with the recommended capacitor Co & the film capacitor 0.1μF.
Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101). Refer to the manual.
※3 Drift is the change 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 Please consult us in regard to use from -40℃.

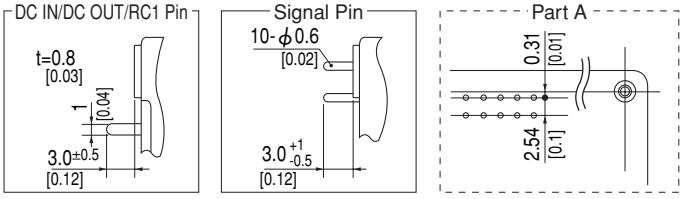
External view











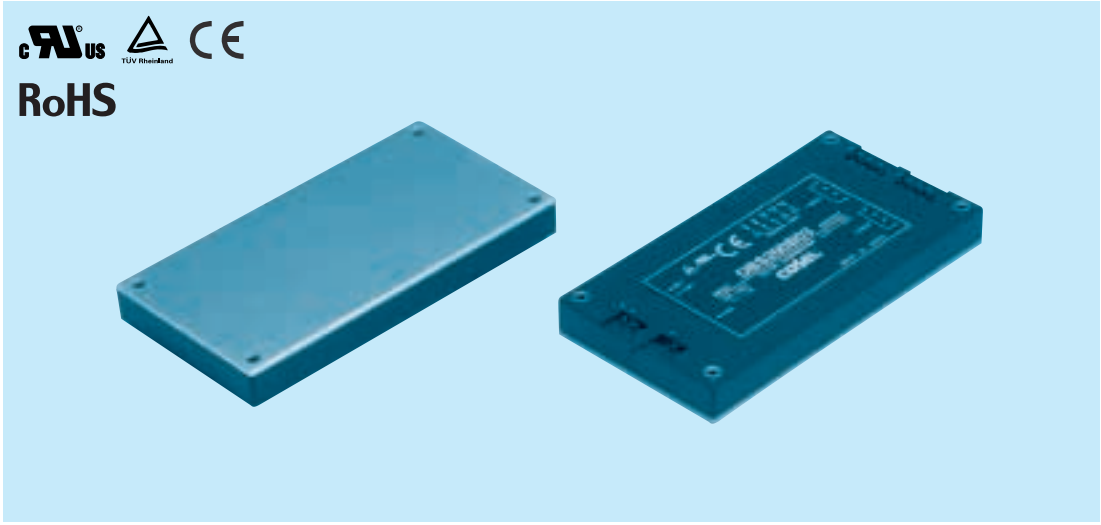
※Weight: 150g max
※Tolerance: ±0.3 [±0.012]
※Base Plate: Aluminum
※Dimensions in mm, [ ]= inches
※Mounting hole screwing torque: 0.49N·m(5.0kgf·cm)

COSEL DC-DC Converters Power Module type

DBS200B

Ordering information

DB	S	200	B	03	
①	②	③	④	⑤	



①Series name
②Single output
③Output wattage
④Input voltage
B :DC200 - 400V
⑤Output voltage

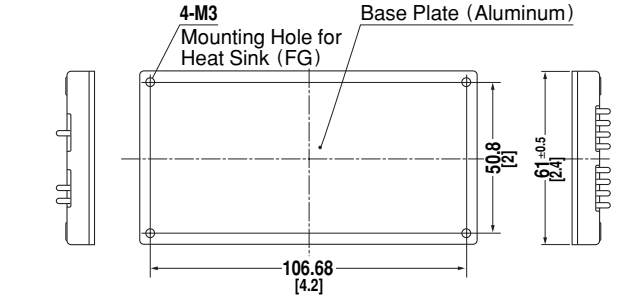
MODEL	DBS200B03	DBS200B05	DBS200B07	DBS200B12
MAX OUTPUT WATTAGE[W]	165	200	210	240
DC OUTPUT	3.3V 50A	5V 40A	7.5V 28A	12V 20A

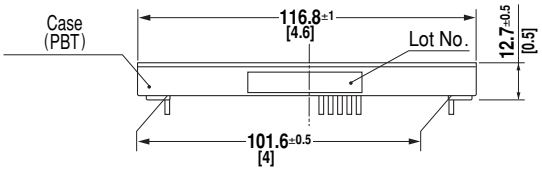
SPECIFICATIONS

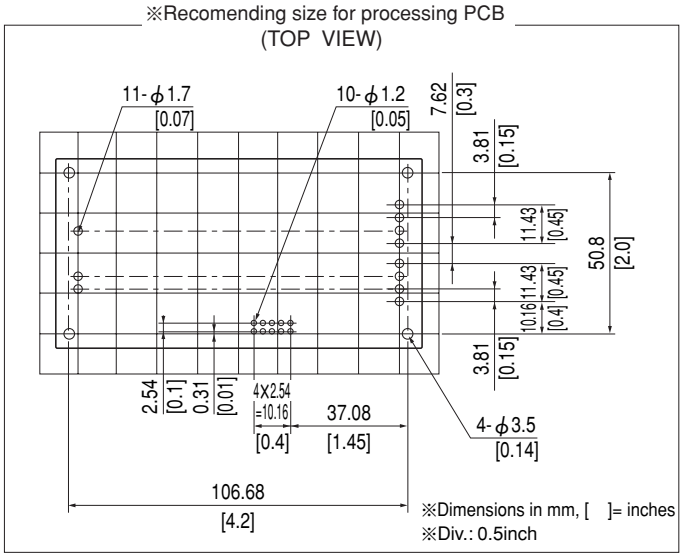
	MODEL		DBS200B03	DBS200B05	DBS200B07	DBS200B12
INPUT	VOLTAGE[V]		DC200 - 400			
	CURRENT[A]	*1	0.75typ	0.86typ	0.87typ	0.99typ
	EFFICIENCY[%]	*1	79typ	83typ	86typ	87typ
OUTPUT	VOLTAGE[V]		3.3	5	7.5	12
	CURRENT[A]		50	40	28	20
	LINE REGULATION[mV]		16max	20max	30max	40max
	LOAD REGULATION[mV]		30max	40max	60max	100max
	RIPPLE[mVp-p]	0 to +85℃ *2	80max	80max	100max	120max
		-20 - 0℃ *2	140max	140max	150max	160max
	RIPPLE NOISE[mVp-p]	0 to +85℃ *2	100max	100max	140max	150max
		-20 - 0℃ *2	150max	150max	160max	180max
	TEMPERATURE REGULATION[mV]	0 to +65℃	35max	50max	75max	120max
		-20 to +85℃	60max	85max	130max	200max
	DRIFT[mV]	*3	16max	20max	30max	40max
	START-UP TIME[ms]		200max (DCIN 280V, Io=100%)			
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage			
	OUTPUT VOLTAGE SETTING[V]		3.25 - 3.45	4.90 - 5.20	7.25 - 7.85	11.60 - 12.60
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically			
	OVERVOLTAGE PROTECTION		4.00 - 5.50V	5.75 - 7.00V	8.60 - 10.50V	13.80 - 16.80V
	REMOTE SENSING		Provided			
	REMOTE ON/OFF		Provided (On both side of input and output)			
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)			
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)			
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)			
	OUTPUT-RC2,RC3		AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15℃)			
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	*4	-20 to +85℃ (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 +85℃, 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, EN50178 Complies with DEN-AN and IEC60950-1			
OTHERS	CASE SIZE/WEIGHT		61×12.7×116.8mm [2.4×0.5×4.6 inches] (W×H×D) / 150g max			
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)			

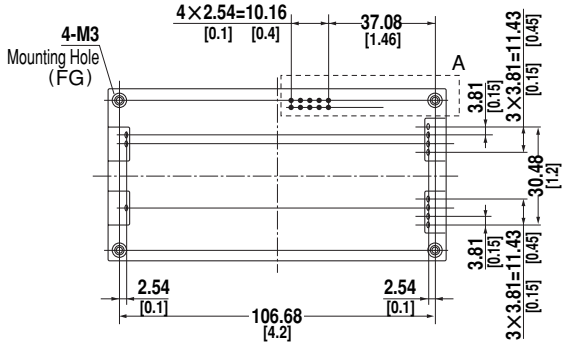
*1 At rated input(DC280V) and rated load.
*2 Ripple and ripple noise is measured by using measuring board with the recommended capacitor Co & the film capacitor 0.1μF.
Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101). Refer to the manual.
*3 Drift is the change 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 Please consult us in regard to use from -40℃.

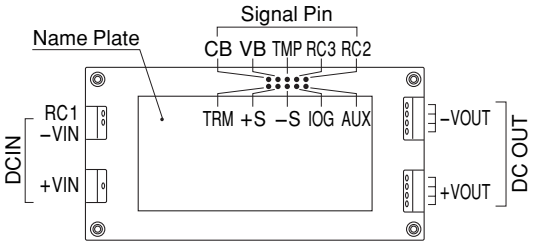
External view

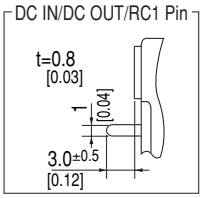


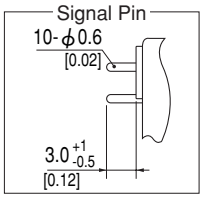


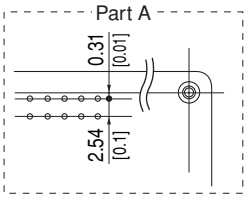








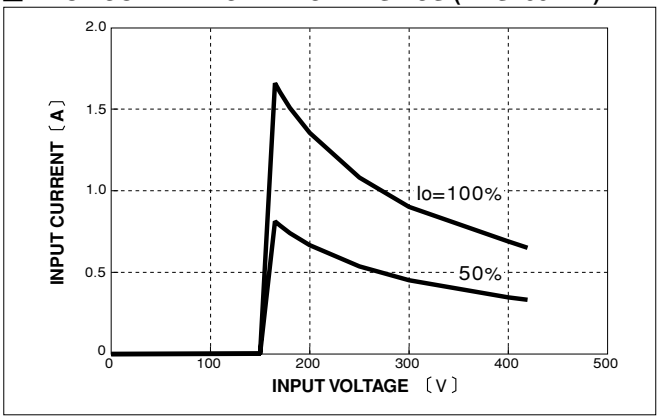




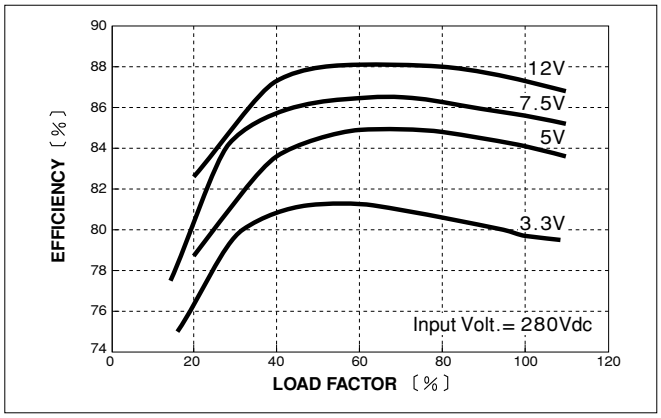
※Weight: 150g max
※Tolerance: ±0.3 [±0.012]
※Base Plate: Aluminum
※Dimensions in mm, [ ]= inches
※Mounting hole screwing torque: 0.49N·m(5.0kgf·cm)

Performance data

■INPUT CURRENT CHARACTERISTICS (DBS200B12)



■EFFICIENCY CHARACTERISTICS



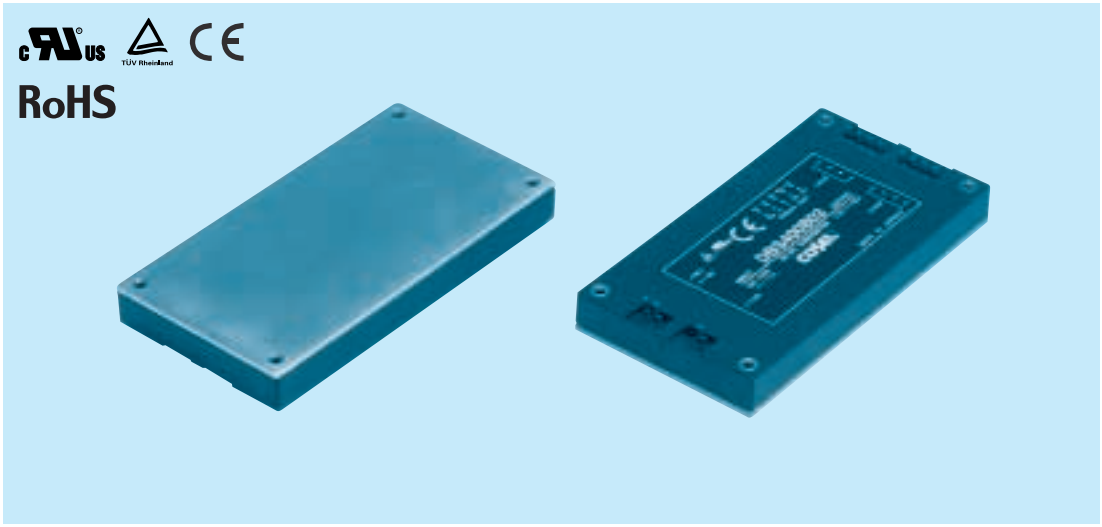
DBS

COSEL DC-DC Converters Power Module type

DBS400B

Ordering information

DB	S	400	B	03	
①	②	③	④	⑤	



①Series name
②Single output
③Output wattage
④Input voltage
B :DC200 - 400V
⑤Output voltage

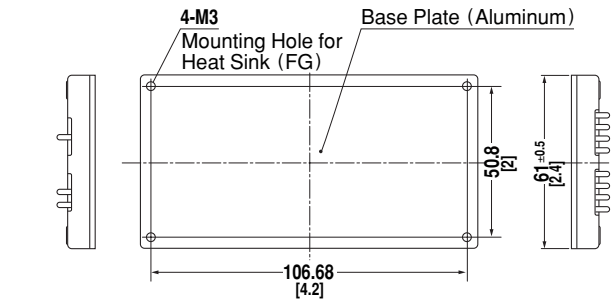
MODEL	DBS400B03	DBS400B05	DBS400B07	DBS400B12	DBS400B15	DBS400B18	DBS400B24	DBS400B28
MAX OUTPUT WATTAGE[W]	264	400	405	408	405	396	408	406
DC OUTPUT	3.3V 80A	5V 80A	7.5V 54A	12V 34A	15V 27A	18V 22A	24V 17A	28V 14.5A

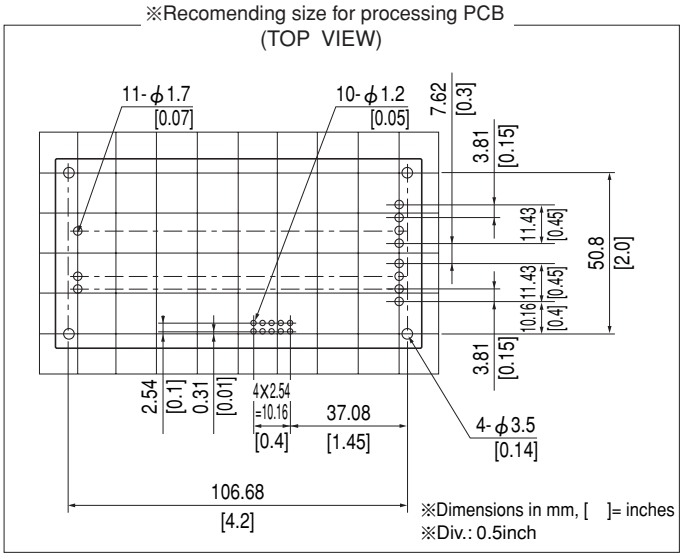
SPECIFICATIONS

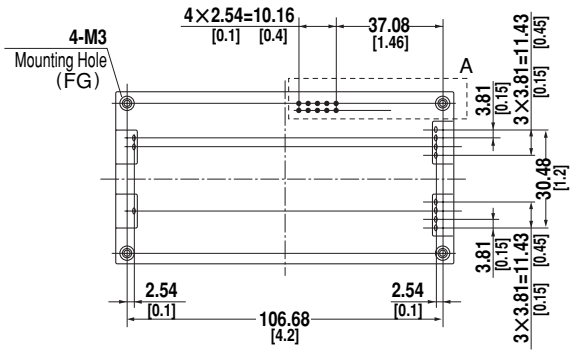
	MODEL		DBS400B03	DBS400B05	DBS400B07	DBS400B12	DBS400B15	DBS400B18	DBS400B24	DBS400B28
INPUT	VOLTAGE[V]		DC200 - 400							
	CURRENT[A]	*1	1.19typ	1.72typ	1.68typ	1.67typ	1.66typ	1.61typ	1.67typ	1.63typ
	EFFICIENCY[%]	*1	79typ	83typ	86typ	87typ	87typ	89typ	87typ	88typ
OUTPUT	VOLTAGE[V]		3.3	5	7.5	12	15	18	24	28
	CURRENT[A]		80	80	54	34	27	22	17	14.5
	LINE REGULATION[mV]		16max	20max	30max	40max	60max	60max	95max	95max
	LOAD REGULATION[mV]		30max	40max	60max	100max	150max	150max	190max	190max
	RIPPLE[mVp-p]	0 to +85℃ *2	80max	80max	100max	120max	120max	120max	120max	120max
		-20 - 0℃ *2	140max	140max	150max	160max	160max	160max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +85℃ *2	100max	100max	140max	150max	150max	150max	150max	150max
		-20 - 0℃ *2	150max	150max	160max	180max	180max	180max	180max	180max
	TEMPERATURE REGULATION[mV]	0 to +65℃	35max	50max	75max	120max	180max	180max	280max	280max
		-20 to +85℃	60max	85max	130max	200max	310max	310max	480max	480max
	DRIFT[mV]	*3	16max	20max	30max	40max	60max	60max	90max	90max
	START-UP TIME[ms]		200max (DCIN 280V, Io=100%)							
	OUTPUT VOLTAGE ADJUSTMENT RANGE		Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage							
	OUTPUT VOLTAGE SETTING[V]		3.25 - 3.45	4.90 - 5.20	7.25 - 7.85	11.60 - 12.60	14.40 - 15.60	17.28 - 18.72	23.04 - 24.96	26.88 - 29.12
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically							
	OVERVOLTAGE PROTECTION		4.00 - 5.50V	5.75 - 7.00V	8.60 - 10.50V	13.80 - 16.80V	17.25 - 21.00V	20.70 - 25.20V	27.60 - 33.60V	32.20 - 39.20V
	REMOTE SENSING		Provided							
	REMOTE ON/OFF		Provided (On both side of input and output)							
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)							
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)							
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)							
	OUTPUT-RC2,RC3		AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15℃)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	*4	-20 to +85℃ (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 +85℃, 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, EN50178 Complies with DEN-AN and IEC60950-1							
OTHERS	CASE SIZE/WEIGHT		61×12.7×116.8mm [2.4×0.5×4.6 inches] (W×H×D) / 180g max							
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)							

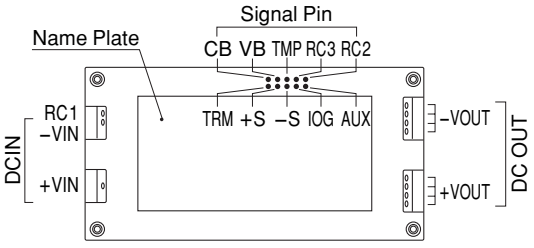
*1 At rated input(DC280V) and rated load.
*2 Ripple and ripple noise is measured by using measuring board with the recommended capacitor Co & the film capacitor 0.1μF.
Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101). Refer to the manual.
*3 Drift is the change 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 Please consult us in regard to use from -40℃.

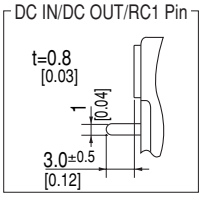
External view

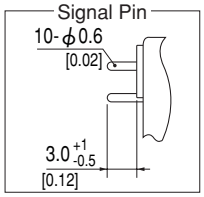


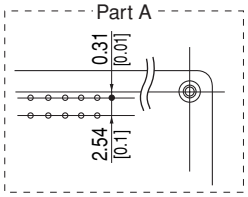








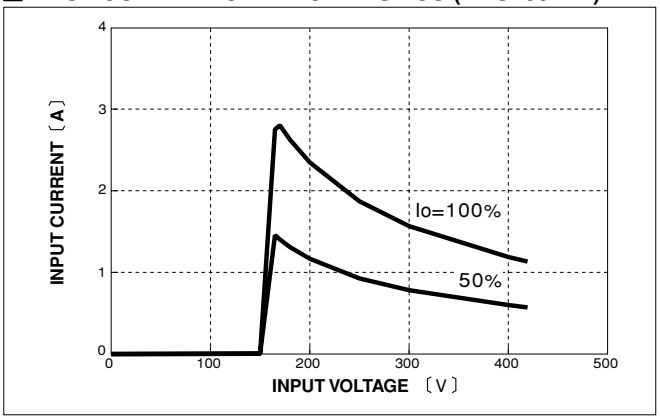




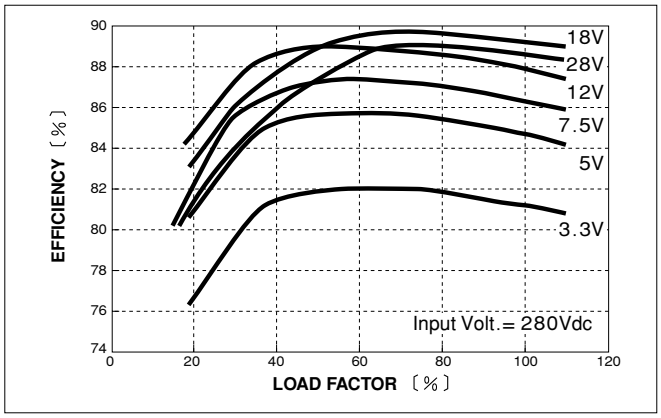
※Weight: 180g max
※Tolerance: ±0.3 [±0.012]
※Base Plate: Aluminum
※Dimensions in mm, [ ]= inches
※Mounting hole screwing torque: 0.49N·m(5.0kgf·cm)

Performance data

■INPUT CURRENT CHARACTERISTICS (DBS400B12)



■EFFICIENCY CHARACTERISTICS



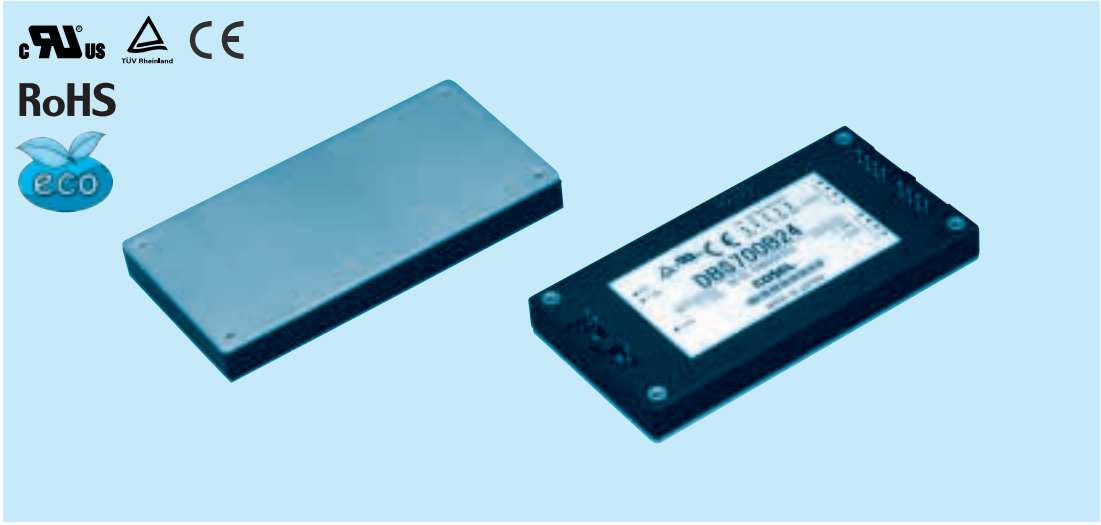
DBS

COSEL DC-DC Converters Power Module type

DBS700B

Ordering information

DB	S	700	B	28	
①	②	③	④	⑤	



①Series name
②Single output
③Output wattage
④Input voltage
B :DC200 - 400V
⑤Output voltage

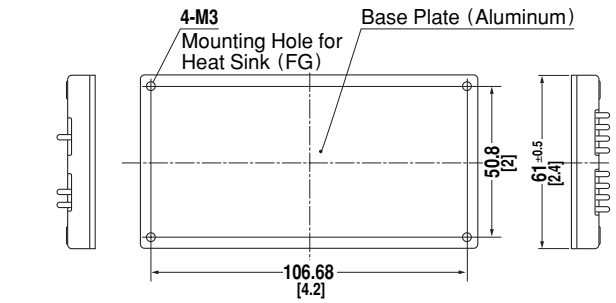
MODEL	DBS700B12	DBS700B24	DBS700B28	DBS700B36	DBS700B48
MAX OUTPUT WATTAGE[W]	696	696	700	702	696
DC OUTPUT	12V 58A	24V 29A	28V 25A	36V 19.5A	48V 14.5A

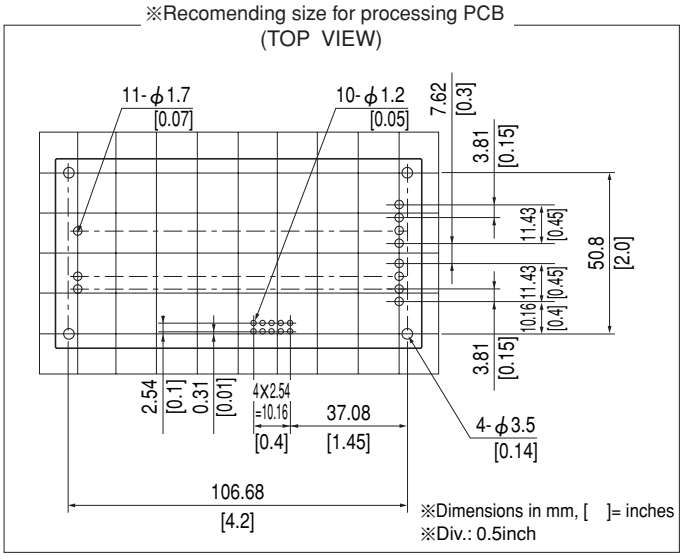
SPECIFICATIONS

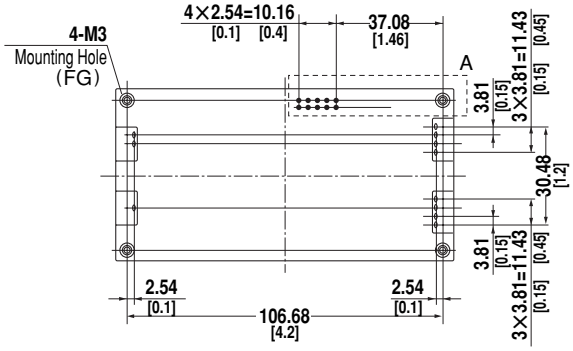
	MODEL		DBS700B12	DBS700B24	DBS700B28	DBS700B36	DBS700B48
INPUT	VOLTAGE[V]		DC200 - 400				
	CURRENT[A]	*1	2.76typ	2.76typ	2.76typ	2.76typ	2.73typ
	EFFICIENCY[%]	*1	90.0typ	90.0typ	90.5typ	90.0typ	91.0typ
OUTPUT	VOLTAGE[V]		12	24	28	36	48
	CURRENT[A]		58	29	25	19.5	14.5
	LINE REGULATION[mV]		40max	95max	95max	95max	120max
	LOAD REGULATION[mV]		100max	190max	190max	200max	240max
	RIPPLE[mVp-p]	0 to +100℃*2	120max	120max	120max	150max	200max
		-40 to 0℃*2	160max	160max	160max	200max	250max
	RIPPLE NOISE[mVp-p]	0 to +100℃*2	150max	150max	150max	200max	250max
		-40 to 0℃*2	180max	180max	180max	240max	400max
	TEMPERATURE REGULATION[mV]	0 to +65℃	120max	280max	280max	360max	480max
		-40 to +100℃	200max	480max	480max	680max	960max
	DRIFT[mV]	*3	40max	90max	90max	120max	180max
	START-UP TIME[ms]		200max (DCIN 280V, Io=100%)				
	OUTPUT VOLTAGE ADJUSTMENT RANGE	*4	Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage				
	OUTPUT VOLTAGE SETTING[V]		11.64 - 12.36	23.28 - 24.72	27.16 - 28.84	34.92 - 37.08	46.56 - 49.44
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION		13.80 - 16.80V	27.60 - 33.60V	32.20 - 39.20V	41.40 - 50.40V	55.20 - 63.00V
	REMOTE SENSING		Provided				
	REMOTE ON/OFF		Provided (On both side of input and output)				
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)				
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)				
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)				
	OUTPUT-RC2,RC3		AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ 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, 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT		196.1m/s², 11ms once each along X, Y and Z axis				
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL, EN60950-1, EN50178				
OTHERS	CASE SIZE/WEIGHT		61×12.7×116.8mm [2.4×0.5×4.6 inches] (W×H×D) / 180g max				
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)				

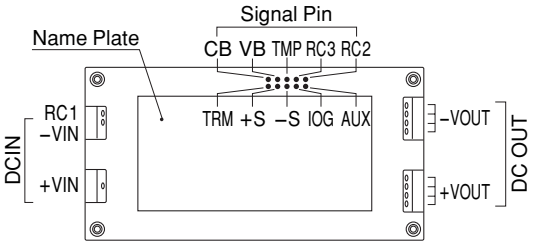
*1 At rated input(DC280V) and rated load.
*2 Ripple and ripple noise is measured by using measuring board with the recommended capacitor Co & the film capacitor 0.1μF. Refer to the manual.
*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
*4 Refer to the manual for the input range.

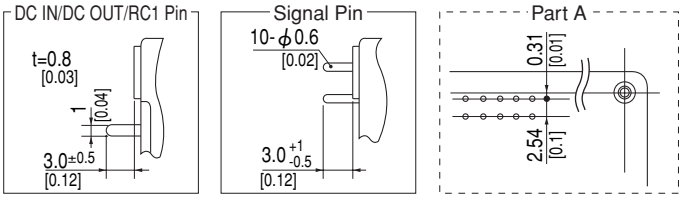
External view







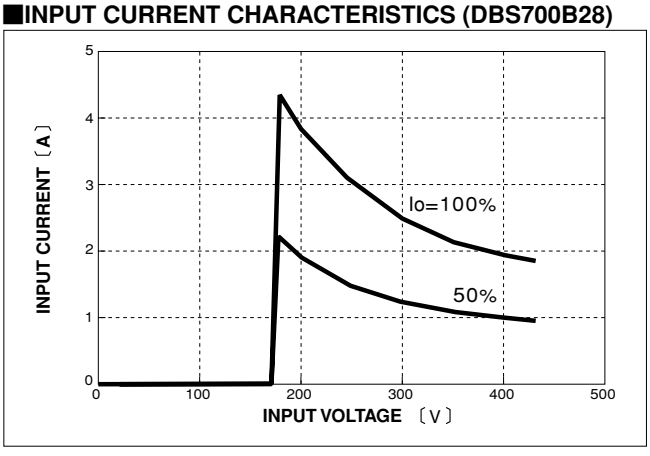




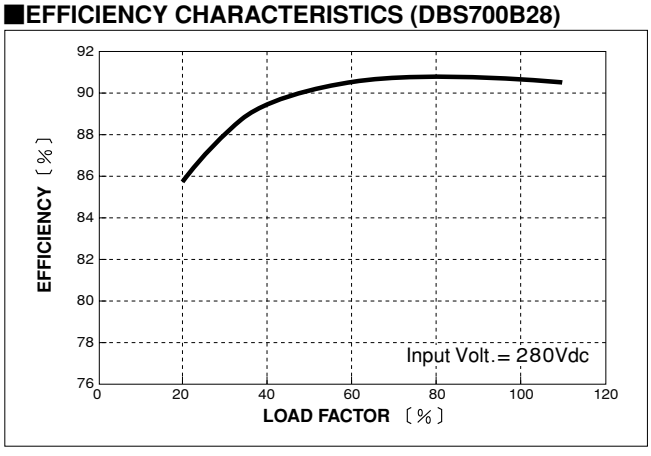
※Weight: 180g max
※Tolerance: ±0.3 [±0.012]
※Base Plate: Aluminum
※Dimensions in mm, [ ]= inches
※Mounting hole screwing torque: 0.49N·m(5.0kgf·cm)

Performance data

■INPUT CURRENT CHARACTERISTICS (DBS700B28)



■EFFICIENCY CHARACTERISTICS (DBS700B28)



DBS

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cosel:

DBS150A12 DBS700B28 DBS400B12 DBS400B24 DBS200B03 DBS100A13R8 DBS700B12 DBS200B07 DBS700B48-T DBS400B05 DBS100A05 DBS400B03 DBS700B36-T DBS200B12 DBS400B18 DBS700B36 DBS700B24 DBS150A15 DBS400B28 DBS700B12-T DBS400B07 DBS700B24-T DBS150A24 DBS700B28-T DBS400B15 DBS200B05 DBS700B48

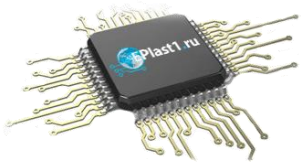
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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Электронная почта: org@eplast1.ru
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