Wibbow

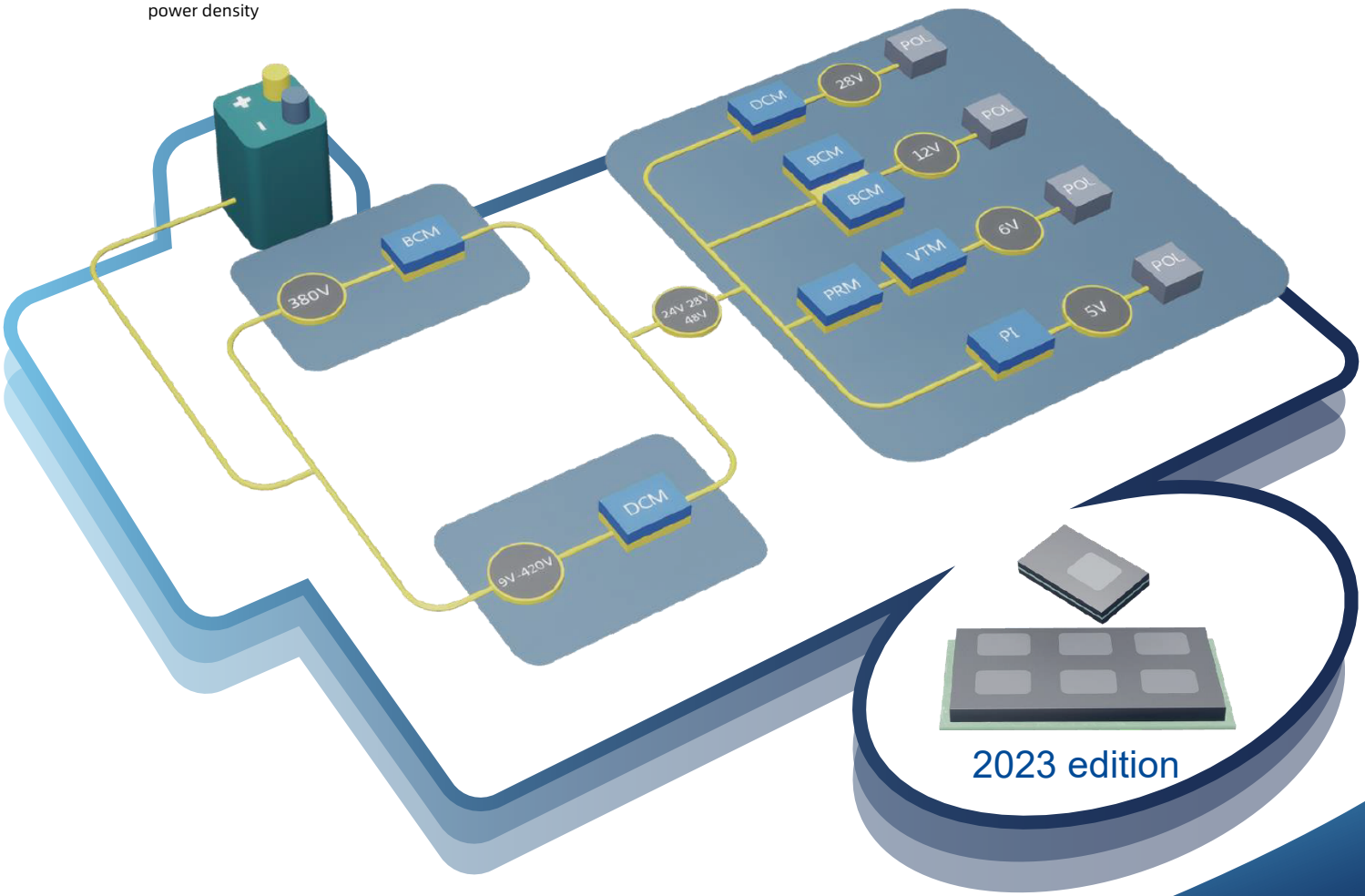
ChiP DC-DC Converter (3rd Gen) Brochure

High power

High power density

Low EMI

Parallel



Introduction to ChiP DC-DC Converter

Features

ChiP DC-DC Converter is the latest generation of modular power supply products based on the revolutionary Converter housed in Package (ChiP) technology , which is applied with advanced MHz soft-switching topology , patented control strategy and packaging technology, and has such distinctive advantages as premium efficiency (97.5%), ultra-high power density (2735W/in3), ultra-small thickness (only 6.73 mm), ultra -light weight (7.8 g), parallelling (more than 8 sets in parallel), and low EMI . Compared with the traditional module power supply , the performance indicators are improved by orders of magnitude , in which the power density is increased by 10 times and the weight is reduced to one tenth; The series also have comprehensive protections (against input over-voltage and under-voltage, output over-voltage, over-current, short circuit and over- temperature), enable control, fault monitoring and temperature monitoring functions . The product design and manufacture comply with the General Specification for Microcircuit Modules (SJ20668-1998). Typical products have passed the third-party appraisal and inspection, and are ideally for missile-borne and satellite -borne systems , UAVs , TR components , data centers , and other highly reliable electronic systems with extremely strict requirements on power, efficiency, volume, weight and height.

Product series	Input voltage range	Output voltage range	Output power	Parallel expansion	Electrical characteristics	Package size	Page
WBPI28H	16~50V	3.3V~48V	25~50W	Not supported	Isolated, Regulated	16.5 x 22.0 x 6.73mm	02
WBPI28WH	9~50V	3.3V~48V	25W	Not supported	Isolated, Regulated	16.5 x 22.0 x 6.73mm	03
WBP124H	18~36V	3.3V~48V	25~50W	Not supported	Isolated, Regulated	16.5 x 22.0 x 6.73mm	04
WBDCM28BC	16~50V	3.3V~48V	120~320W	Supported	Isolated, Regulated	38.72 x 22.80 x7.21mm	05
WBDCM28WBC	9~50V	3.3V~48V	80~160W	Supported	Isolated, Regulated	38.72 x 22.80 x7.21mm	06
WBDCM24BC	18~36V	3.3V~48V	120~320W	Supported	Isolated, Regulated	38.72 x 22.80 x7.21mm	07
WBDCM48BC	36~75V	5V~48V	160~320W	Supported	Isolated, Regulated	38.72 x 22.80 x7.21mm	08
WBDCM270AC	160~420V	3.3V~48V	150~500W	Supported	Isolated, Regulated	47.91 x 22.80 x 7.21mm	09
WBDCM300AC	200~420V	3.3V~48V	150~600W	Supported	Isolated, Regulated	47.91 x 22.80 x 7.21mm	10
WBDCM275AC	120~420V	3.3V~48V	110~375W	Supported	Isolated, Regulated	47.91 x 22.80 x 7.21mm	11
WBPRM28F	16～50V	26V～50V	120~500W	Supported	Non-isolated, Regulated	32.5x 22.0 x 6.73mm	12
WBPRM36F	18～60V	26V～55V	120~240W	Supported	Non-isolated, Regulated	32.5x 22.0 x 6.73mm	13
WBPRM48BF	38～55V	5V～55V	400~600W	Supported	Non-isolated, Regulated	32.5x 22.0 x 6.73mm	14
WBPRM48CF	45～55V	5V～55V	400~600W	Supported	Non-isolated, Regulated	32.5x 22.0 x 6.73mm	15
WBPRM48AF	36～75V	20～55V	400~600W	Supported	Non-isolated, Regulated	32.5x 22.0 x 6.73mm	16
WBVTM36F	26～50V	3V～24V	120W	Supported	Isolated, unregulated	32.5x 22.0 x 6.73mm	17
WBVTM48F	26～55V	4V～32V	200~300W	Supported	Isolated, unregulated	32.5x 22.0 x 6.73mm	18
WBBCM48BF	38～55V	4V～32V	200~300W	Supported	Isolated, unregulated	32.5x 22.0 x 6.73mm	19
WBBCM384WEC	260～410V	12V,24V	816~1500W	Supported	Isolated, unregulated	61.0x 25.14 x 7.21mm	20
WBBCM384WDC	260～410V	48V	816~1680W	Supported	Isolated, unregulated	63.3x 22.8 x 7.21mm	21
WBBCM384EC	360～400V	12V,24V	816~1500W	Supported	Isolated, unregulated	61.0x 25.14 x 7.21mm	22
WBBCM384DC	360～400V	48V	816~1680W	Supported	Isolated, unregulated	63.3x 22.8 x 7.21mm	23
WBDCM270AFL	160~420V	3.3V~48V	150~500W	Supported	Isolated, Regulated	65.0x 27.2 x 9.8mm	24
WBDCM270ATH	160~420V	3.3V~48V	150~500W	Supported	Isolated, Regulated	51.6x 39.2 x 9.8mm	25
WBDCM300AFL	200~420V	3.3V~48V	150~600W	Supported	Isolated, Regulated	65.0x 27.2 x 9.8mm	26
WBDCM300ATH	200~420V	3.3V~48V	150~600W	Supported	Isolated, Regulated	51.6x 39.2 x 9.8mm	27

WBPI28H Series ChiP DC-DC Converter

Features

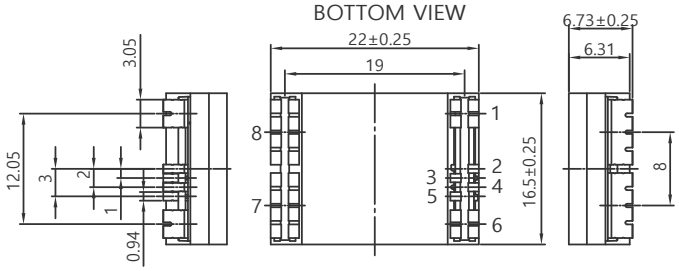
- Isolated, Regulated
- Ultra-small package
- Maximum volume power density: 334W/in3
- Weight: only 7.8 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- 2250Vdc isolation
- Operating temperature: -55℃~100℃
- HALF CHIP: Package: 16.5 x22.0x6.73 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

Highly integration | Low EMI | Isolated, Regulated | Small size

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPI33H-28M3V3LS	16～50V	3.3V	2.97~3.63V	10A	33W	83%	In development
WBPI50H-28M05LS	16～50V	5V	4.0~5.5V	10A	50W	85.3%	Available
WBPI50H-28M12LS	16～50V	12V	9.6~13.2V	4.2A	50W	88%	Available
WBPI50H-28M15LS	16～50V	15V	12~16.5V	3.3A	50W	88%	In development
WBPI50H-28M18LS	16～50V	18V	14.4~19.8V	2.8A	50W	88%	In development
WBPI50H-28M24LS	16～50V	24V	22.4~30.8V	2.1A	50W	88.5%	In development
WBPI50H-28M28LS	16～50V	28V	22.4~30.8V	1.8A	50W	88.5%	In development
WBPI50H-28M48LS	16～50V	48V	36~52.8V	1.8A	50W	89%	In development
WBPI25H-28M05LS	16～50V	5V	4.0~5.5V	5A	25W	84.5%	Available
WBPI25H-28M12LS	16～50V	12V	9.6~13.2V	2.1A	25W	87%	Available

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	SGND	Signal GND
3	TM	Temperature monitoring terminal
4	TRIM	Voltage regulation terminal
5	ENABLE	Enables and disables power supply
6	-IN	Negative input power terminal
7	-OUT	Negative output power terminal
8	+OUT	Positive output power terminal

Part Numbering

WB	PI	33	H	-	28	M	3V3	L	S
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type	Paralleling
Wibbow	Isolated and regulated microchip series	33: 33W 50: 50W 25: 25W	H: HALF CHIP		28: 16~50V	M: Tc: -55~100℃ Ts: -65~100℃ H: Tc: -40~100℃ Ts: -55~100℃ T: Tc: -40~100℃ Ts: -40~100℃	3V3: 3.3V 05: 5V 12: 12V 15: 15V 18: 18V 24: 24V 28: 28V 48: 48V	L: Surface Mount Technology (SMT)	P: Parallel S: Operate stand-alone

WBPI28WH Series ChiP DC-DC Converter

Features

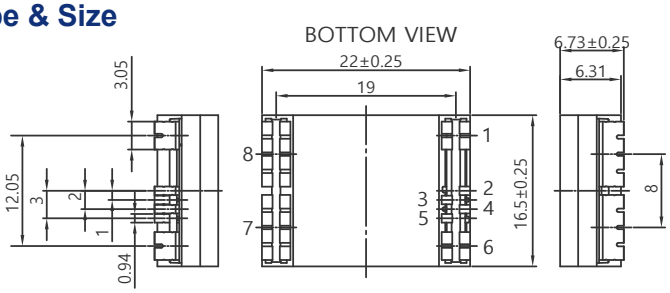
- Wide-input isolated voltage regulation: 9V-50V
- Ultra-small package
- High volume power density: 167W/in3
- High weight power density: 3.2 W/g
- Weight: only 7.8 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- 2250Vdc isolation
- Operating temperature: -55℃~100℃
- HALF CHIP package: 16.5 x22.0x6.73 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

Wide input | Low EMI | Isolated, Regulated | Small size

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPI16H-28WM3V3LS	9～50V	3.3V	2.97~3.36V	5A	16.5W	82%	In development
WBPI25H-28WM05LS	9～50V	5V	4.0~5.5V	5A	25W	84.2%	Available
WBPI25H-28WM12LS	9～50V	12V	9.6~13.2V	2.1A	25W	86%	Available
WBPI25H-28WM15LS	9～50V	15V	12~16.5V	1.6A	25W	86%	In development
WBPI25H-28WM18LS	9～50V	18V	14.4~19.8V	1.4A	25W	86%	In development
WBPI25H-28WM24LS	9～50V	24V	22.4~30.8V	1.04A	25W	87%	In development
WBPI25H-28WM28LS	9～50V	28V	22.4~30.8V	0.9A	25W	87%	In development
WBPI25H-28WM48LS	9～50V	48V	38.4~52.8V	0.52A	25W	88%	In development

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	SGND	Signal GND
3	TM	Temperature monitoring terminal
4	TRIM	Voltage regulation terminal
5	ENABLE	Enables and disables power supply
6	-IN	Negative input power terminal
7	-OUT	Negative output power terminal
8	+OUT	Positive output power terminal

Part Numbering

WB	PI	16	H	-	28W	M	3V3	L	S
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type	Paralleling
Wibbow	Isolated and regulated microchip series	16: 16W 25: 25W	H: HALF CHIP		28W: 9~50V	M: T_C: -55~100°C T_S: -65~100°C H: T_C: -40~100°C T_S: -55~100°C T: T_C: -40~100°C T_S: -40~100°C	3V3: 3.3V 05: 5V 12: 12V 15: 15V 18: 18V 24: 24V 28: 28V 48: 48V	L: Surface Mount Technology (SMT)	P: Parallel S: Operate stand-alone

WBPI24H Series Microchip DC-DC Converter

Product Features

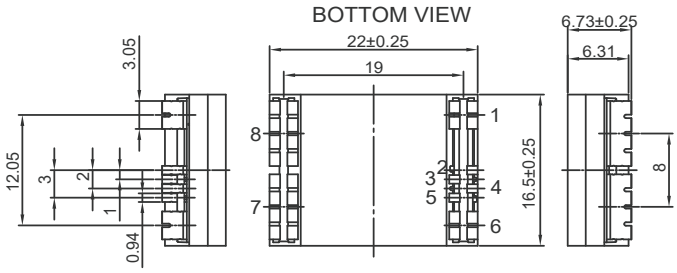
- Isolated voltage regulation
- Ultra-small size package
- High volume power density: 334 W/in³
- High weight power density: 6.4 W/g
- Weight: 7.8 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- 2250 Vdc dielectric strength
- Operating temperature: -55℃~ 100℃
- HALF CHIP package: 16.5×22.0×6.73 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High integration | Low EMI | Isolated voltage regulation | Small volume

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBPI33H-24M3V3LS	18～36V	3.3V	2.97~3.36V	10A	33W	83.0%	Developing
WBPI50H-24M05LS	18～36V	5.0V	4.00~5.50V	10A	50W	85.3%	Available for delivery
WBPI50H-24M12LS	18～36V	12V	9.60~13.2V	4.2A	50W	88.0%	Available for delivery
WBPI50H-24M15LS	18～36V	15V	12.0~16.5V	3.3A	50W	88.0%	Developing
WBPI50H-24M18LS	18～36V	18V	14.4~19.8V	2.8A	50W	88.0%	Developing
WBPI50H-24M24LS	18～36V	24V	19.2~26.4V	2.1A	50W	88.5%	Developing
WBPI50H-24M28LS	18～36V	28V	22.4~30.8V	1.8A	50W	88.5%	Developing
WBPI50H-24M48LS	18～36V	48V	38.4~52.8V	1.04A	50W	89.0%	Developing
WBPI25H-24M05LS	18～36V	5.0V	4.00~5.50V	5.0A	25W	84.5%	Developing
WBPI25H-24M12LS	18～36V	12V	9.60~13.2V	2.1A	25W	87.0%	Developing

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	SGND	Signal ground
3	TM	Temperature monitoring terminal
4	TRIM	Voltage regulating terminal
5	ENABLE	Enable terminal
6	-IN	Input negative terminal
7	-OUT	Output negative terminal
8	+OUT	Output positive terminal

Naming rule

WB	PI	33	H	24	M	3V3	L	S
Brand name	Series name	Output power	Package code	Input voltage	Temperature grade	Output voltage	Through hole type	Parallel function
Wibbow	Isolated voltage regulation Microchip series	33: 33W 50: 50W	H: HALF CHIP	24: 18~36V	M : T_C: -55~100℃ T_S : -65~100℃ H: T_C: -40~100℃ T_S : -55~100℃ T: T_C: -40~100℃ T_S : -40~100℃	3V3: 3.3V 05: 5V 12: 12V 15: 15V 18: 18V 24: 24V 28: 28V 48: 48V	Surface mount	S: Standalone operation

WBDCM28BC Series Microchip DC-DC Converter

Product Features

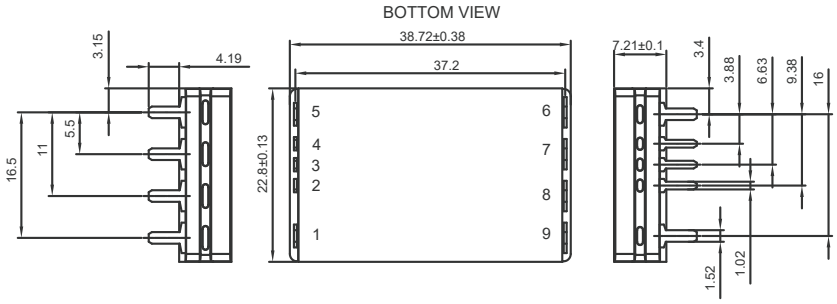
- Isolated voltage regulation
- High volume power density: 818 W/in^3
- High weight power density: 13.2 W/g
- Weight: 24.2 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- 2250 Vdc dielectric strength
- Operating temperature: -55℃~ 100℃
- CHIP3623 package: 38.72×22.80×7.21 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Low EMI | Scalable | Isolated voltage regulation

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBDCM120BC-28M3V3TP	16～50V	3.3V	2.97～3.63V	36.3A	120W	88.5%	Available for delivery
WBDCM180BC-28M05TP	16～50V	5.0V	4.00～5.50V	36.0A	180W	90.3%	Available for delivery
WBDCM320BC-28M12TP	16～50V	12V	7.20～13.2V	26.7A	320W	92.2%	Available for delivery
WBDCM320BC-28M15TP	16～50V	15V	9.00～16.5V	21.3A	320W	91.7%	Available for delivery
WBDCM320BC-28M24TP	16～50V	24V	14.4～26.4V	13.3A	320W	93.2%	Available for delivery
WBDCM320BC-28M28TP	16～50V	28V	22.0～30.8V	11.4A	320W	93.4%	Available for delivery
WBDCM320BC-28M48TP	16～50V	48V	28.8～52.8V	6.70A	320W	93.0%	Available for delivery

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable terminal
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

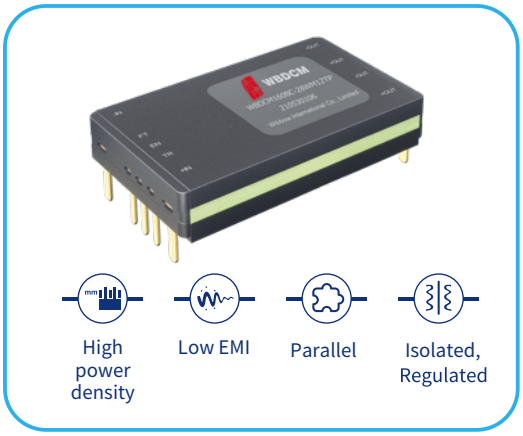
Naming rule

WB	DCM	120	BC	28	M	3V3	T	P
Brand name	Series name	Output power	Package code	Input voltage	Temperature grade	Output voltage	Through hole type	Parallel function
Wibbow	Isolated voltage regulation Microchip series	120：120W 180：180W 320：320W	BC：CHIP3623	28：16-50V	M：T_C：-55~100℃ T_S：-65~100℃ H：T_C：-40~100℃ T_S：-55~100℃ T：T_C：-40~100℃ T_S：-40~100℃	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	Through hole	P: Support parallel connection S: Standalone operation

WBDCM28WBC Series ChiP DC-DC Converter

Features

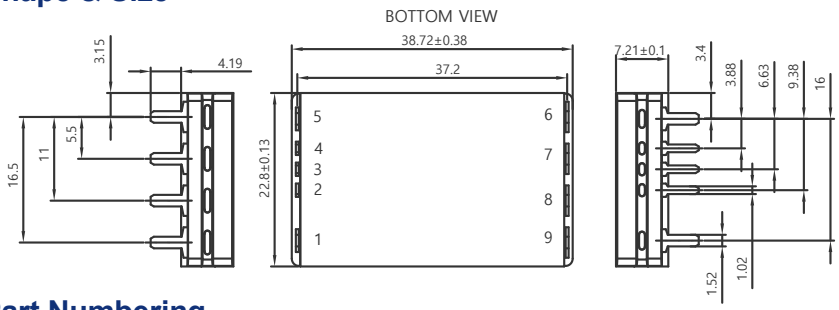
- Wide-input isolated voltage regulation
- High volume power density: 409W/in3
- High weight power density: 6.6 W/g
- Weight: only 24.2 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- 2250Vdc isolation
- Operating temperature: -55℃~100℃
- Package: 38.72 x22.80x7.21 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)



Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM80BC-28WM3V3TP	3.3V	9～50V	2.97~3.63V	24.3A	80W	87.4%	Available
WBDCM80BC-28WM05TP	5V	9～50V	3.5~5.5V	16A	80W	88.4%	Available
WBDCM160BC-28WM12TP	12V	9～50V	7.2~13.2V	13.4A	160W	90.8%	Available
WBDCM160BC-28WM15TP	15V	9～50V	9.0~16.5V	10.7A	160W	90.6%	Available
WBDCM160BC-28WM24TP	24V	9～50V	14.4~26.4V	6.7A	160W	90.8%	Available
WBDCM160BC-28WM28TP	28V	9～50V	16.8~30.8V	5.8A	160W	91.0%	Available
WBDCM160BC-28WM48TP	48V	9～50V	28.8~52.8V	3.4A	160W	90.5%	Available

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TR	Adjusts output voltage
3	EN	Enables and disables power supply
4	FT	Fault monitoring
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

Part Numbering

WB	DCM	80	BC	-	28W	M	3V3	T	P
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type	Paralleling
Wibbow	Isolated and regulated microchip series	80: 80W 120: 120W	BC: CHIP3623		28W: 9~50V	M: Tc: -55~100°C Ts: -65~100°C H: Tc: -40~100°C Ts: -55~100°C T: Tc: -40~100°C Ts: -40~100°C	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	T: Through hole	P: Parallel S: Operate stand-alone

WBDCM24BC Series Microchip DC-DC Converter

Product Features

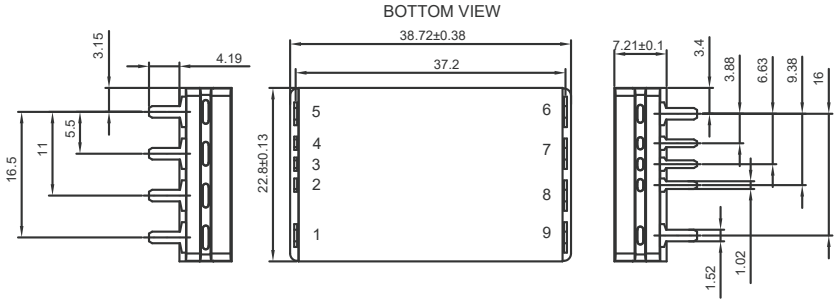
- Isolated voltage regulation
- High volume power density: 818 W/in^3
- High weight power density: 13.2 W/g
- Weight: 24.2 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- 2250 Vdc dielectric strength
- Operating temperature: -55℃~ 100℃
- CHIP3623 package: 38.72 × 22.80 × 7.21 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Low EMI | Scalable | Isolated voltage regulation

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBDCM120BC-24M3V3TP	18～36V	3.3V	2.97~3.63V	36.3A	120W	88.4%	Available for delivery
WBDCM180BC-24M05TP	18～36V	5V	4.0~5.5V	36A	180W	91.9%	Available for delivery
WBDCM320BC-24M12TP	18～36V	12V	7.2~13.2V	26.7A	320W	92.2%	Available for delivery
WBDCM320BC-24M15TP	18～36V	15V	9.0~16.5V	21.3A	320W	92.3%	Available for delivery
WBDCM320BC-24M24TP	18～36V	24V	14.4~26.4V	13.3A	320W	91.5%	Available for delivery
WBDCM320BC-24M28TP	18～36V	28V	16.8~30.8V	11.4A	320W	93.1%	Available for delivery
WBDCM320BC-24M36TP	18～36V	36V	21.6~39.6V	8.8A	320W	93.0%	Available for delivery
WBDCM320BC-24M48TP	18～36V	48V	28.8~52.8V	6.7A	320W	92.0%	Available for delivery

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable terminal
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Naming rule

WB	DCM	120	BC	24	M	3V3	T	P
Brand name	Series name	Output power	Package code	Input voltage	Temperature grade	Output voltage	Through hole type	Parallel function
Wibbow	Isolated voltage regulation Microchip series	120：120W 180：180W 320：320W	BC：CHIP3623	24：18-36V	M : T_C: -55~100℃ T_S : -65~100℃ H: T_C: -40~100℃ T_S : -55~100℃ T： T_C: -40~100℃ T_S : -40~100℃	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 36: 36V 48: 48V	Through hole	P: Support parallel connection S: Standalone operation

WBDCM270AC Series Microchip DC-DC Converter

Product Features

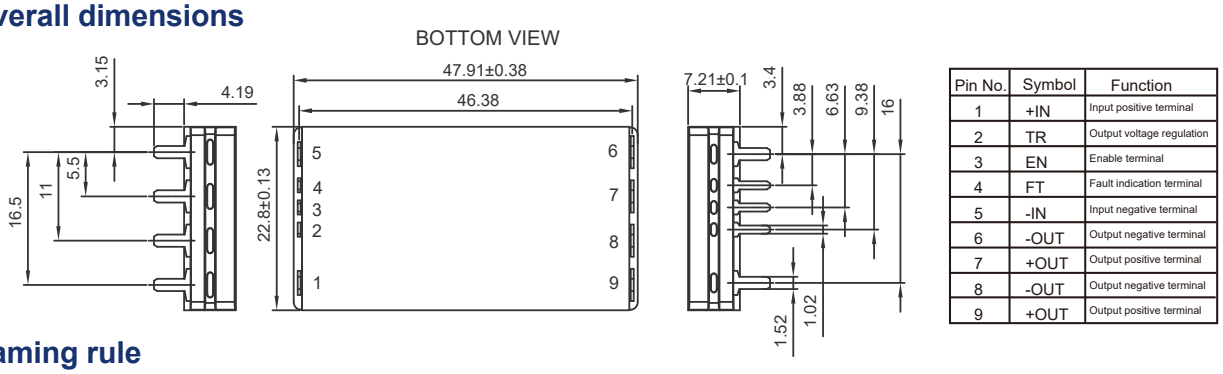
- Wide input isolated voltage regulation: 160V~420V
- High volume power density: 1040 W/in^3
- High weight power density: 17.4 W/g
- Weight: 28 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- 4242 Vdc dielectric strength
- Operating temperature: -55℃~ 100℃
- CHIP3623 package: 47.91 × 22.80 × 7.21 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Low EMI | Scalable | Isolated voltage regulation

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBDCM150AC-270M3V3TP	160～420V	3.3V	3.0～3.6V	45.46A	150W	87.7%	Available for delivery
WBDCM250AC-270M05TP	160～420V	5V	4.0～5.5V	50A	250W	89.1%	Available for delivery
WBDCM500AC-270M12TP	160～420V	12V	7.2～13.2V	41.67A	500W	91.1%	Available for delivery
WBDCM500AC-270M15TP	160～420V	15V	9.0~16.5V	33.4A	500W	91.8%	Available for delivery
WBDCM500AC-270M24TP	160～420V	24V	14.4~26.4V	20.84A	500W	92.6%	Available for delivery
WBDCM500AC-270M28TP	160～420V	28V	16.8~30.8V	17.86A	500W	93.2%	Available for delivery
WBDCM500AC-270M48TP	160～420V	48V	28.8~52.8V	10.42A	500W	92.0%	Developing

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable terminal
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Naming rule

WB	DCM	150	AC	270	M	3V3	T	P
Brand name	Series name	Output power	Package code	Input voltage	Temperature grade	Output voltage	Through hole type	Parallel function
Wibbow	Isolated voltage regulation Microchip series	120: 120W 250: 250W 500: 500W	AC: CHIP4623	270: 160~420V	M : Tc : -55~100°C TS : -65~100°C H: Tc : -40~100°C TS : -55~100°C T: Tc : -40~100°C TS : -40~100°C	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	Plug-in installation	P: Support parallel connection S: Standalone operation

WBDCM300AC Series ChiP DC-DC Converter

Features

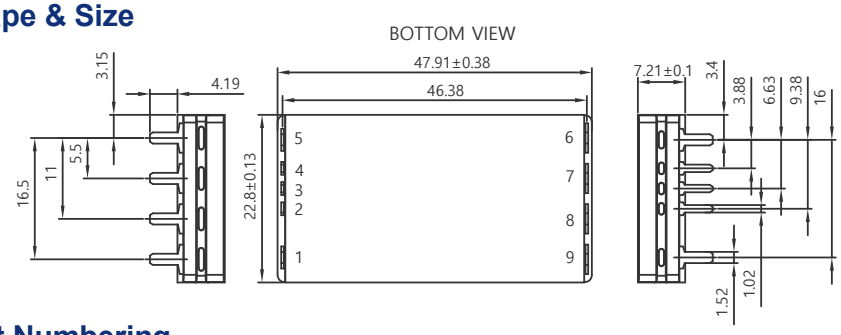
- Wide-input isolated voltage regulation: 200V-420V
- High volume power density: 1040W/in3
- High weight power density: 17.4 W/g
- Weight: only 28 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- 4242Vdc isolation
- Operating temperature: -55℃~100℃
- Package: 47.91 x22.80x7.21 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

High power density | Low EMI | Parallel | Isolated, Regulated

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM250AC-300M3V3TP	200～420V	3.3V	3.0～3.6V	45.46A	250W	87.7%	In development
WBDCM250AC-300M05TP	200～420V	5V	4.0～5.5V	50A	250W	89.1%	In development
WBDCM500AC-300M12TP	200～420V	12V	7.2～13.2V	41.67A	500W	91.1%	Available
WBDCM500AC-300M15TP	200～420V	15V	9.0~16.5V	33.4A	500W	91.8%	Available
WBDCM500AC-300M24TP	200～420V	24V	14.4~26.4V	20.84A	500W	92.6%	Available
WBDCM500AC-300M28TP	200～420V	28V	16.8~30.8V	17.86A	500W	93.2%	Available
WBDCM500AC-300M48TP	200～420V	48V	28.8~52.8V	10.42A	500W	92.0%	In development
WBDCM600AC-300M24TP	200～420V	24V	14.4~26.4V	25A	600W	92.6%	Available

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TR	Adjusts output voltage
3	EN	Enables and disables power supply
4	FT	Fault monitoring
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

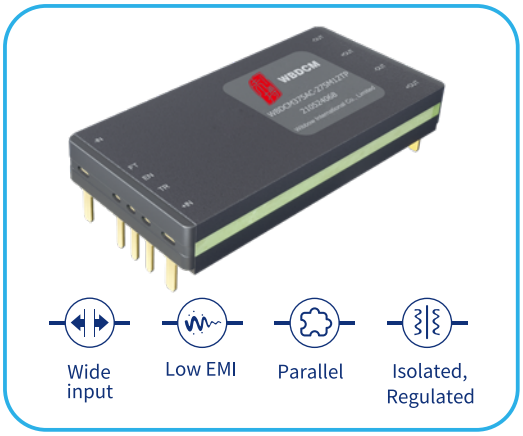
Part Numbering

WB	DCM	250	AC	-	300	M	3V3	T	P
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type	Paralleling
Wibbow	Isolated and regulated microchip series	250: 250W 500: 500W 600: 600W	AC: CHIP4623		200: 200 ~ 420V	M: Tc: -55~100°C Ts: -65~100°C H: Tc: -40~100°C Ts: -55~100°C T: Tc: -40~100°C Ts: -40~100°C	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	T: Through hole	P: Parallel S: Operate stand-alone

WBDCM275AC Series ChiP DC-DC Converter

Features

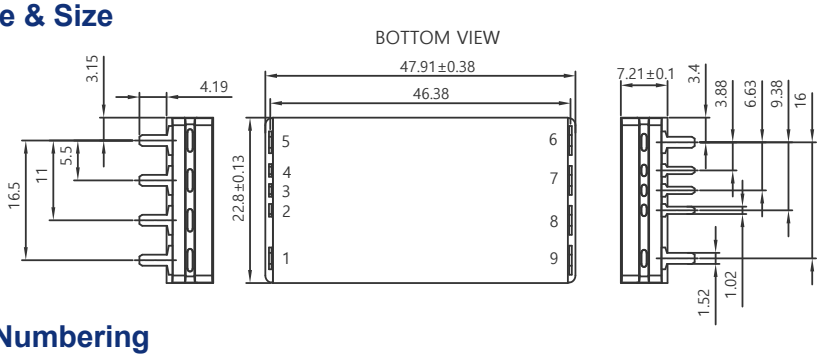
- Ultra-wide-input isolated voltage regulation: 120V-420V
- High volume power density: 1040W/in3
- High weight power density: 17.4 W/g
- Weight: only 28 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- 4242Vdc isolation
- Operating temperature: -55℃~100℃
- Package: 47.91 x22.80x7.21 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)



Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM110AC-275M3V3TP	120～420V	3.3V	3.0~3.6V	33.4A	110W	86%	In development
WBDCM190AC-275M05TP	120～420V	5V	3.5~5.5V	38A	190W	88.1%	In development
WBDCM375AC-275M12TP	120～420V	12V	7.2~13.2V	31.3A	375W	92%	Available
WBDCM375AC-275M15TP	120～420V	15V	9.0~16.5V	25A	375W	90.1%	Available
WBDCM375AC-275M24TP	120～420V	24V	14.4~26.4V	15.7A	375W	92.6%	Available
WBDCM375AC-275M28TP	120～420V	28V	16.8~30.8V	13.4A	375W	92.6%	Available
WBDCM375AC-275M48TP	120～420V	48V	28.8~52.8V	7.9A	375W	91%	In development

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TR	Adjusts output voltage
3	EN	Enables and disables power supply
4	FT	Fault monitoring
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

Part Numbering

WB	DCM	110	AC	-	275	M	3V3	T	P
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type	Paralleling
Wibbow	Isolated and regulated microchip series	110: 110W 190: 190W 375: 375W	AC: CHIP4623		275: 120 ~ 420V	M: Tc: -55~100°C Ts: -65~100°C H: Tc: -40~100°C Ts: -55~100°C T: Tc: -40~100°C Ts: -40~100°C	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	T: Through hole	P: Parallel S: Operate stand-alone

WBPRM28F Series Microchip DC-DC Converter

Product Features

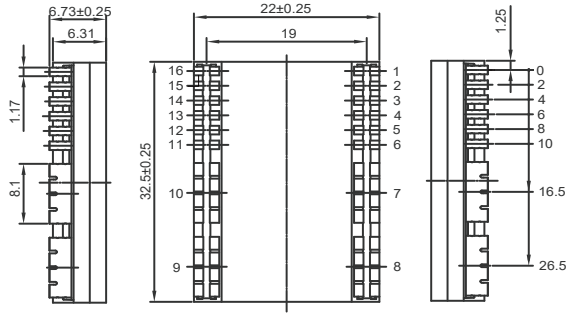
- Wide input wide output
- Maximum volume power density: 1702.7 W/in^3
- Maximum weight power density: 31.25 W/g
- Weight: 16 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 5 units
- Cascade JVTM composition fractional architecture
- Operating temperature: -55℃~ 100℃
- FULL CHIP package: 32.5× 22.0 × 6.73 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Low EMI | Scalable | Fractional architecture

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBPRM120F-28M36L	16～50V	36V	26V～50V	3.33A	120W	95.5%	Available for delivery
WBPRM240F-28M36L	16～50V	36V	26V～50V	6.66A	240W	95.5%	Developing
WBPRM500F-28M24L	20～40V	24V	20V～40V	20.8A	500W	95%	Available for delivery

Overall dimensions



JPRM28F36M120L、JPRM28F36M240L

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	VC	VTM control	9	-OUT	Output negative terminal
2	PC	Primary side control terminal	10	+OUT	Output positive terminal
3	TM	Dead end	11	CD	Voltage compensation
4	IL	Current limiting setting	12	NC	Dead end
5	NC	Dead end	13	OS	Output voltage setting
6	PR	Parallel control	14	SG	Signal ground
7	+IN	Input positive terminal	15	SC	Secondary side control terminal
8	-IN	Input negative terminal	16	VH	Auxiliary source

JPRM28F24M500L

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	PR	Parallel control	9	-OUT	Output negative terminal
2	PC	Primary side control terminal	10	+OUT	Output positive terminal
3	TRIM	Output voltage setting	11	VC	VTM control
4	NC	Dead	12	RE	Outer loop reference
5	NC	Dead	13	SG	Signal ground
6	AL	Adaptive loop control	14	IF	Current monitoring
7	+IN	Input positive terminal	15	VS	Auxiliary source
8	-IN	Input negative terminal	16	VT	VTM temperature compensation

Naming rule

WB	PRM	120	F	28	M	36	L
Brand name	Series name	Output power	Package code	Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated voltage regulation Microchip series	120: 120W 240: 240W 500: 500W	F: FULL CHIP	28: 16-50V	M : T_C : -55~100°C T_S : -65~100°C H: T_C : -40~100°C T_S : -55~100°C T: T_C : -40~100°C T_S : -40~100°C	36: 36V 24: 24V	L: Surface mount T: Through hole

WBPRM36F Series ChiP DC-DC Converter

Features

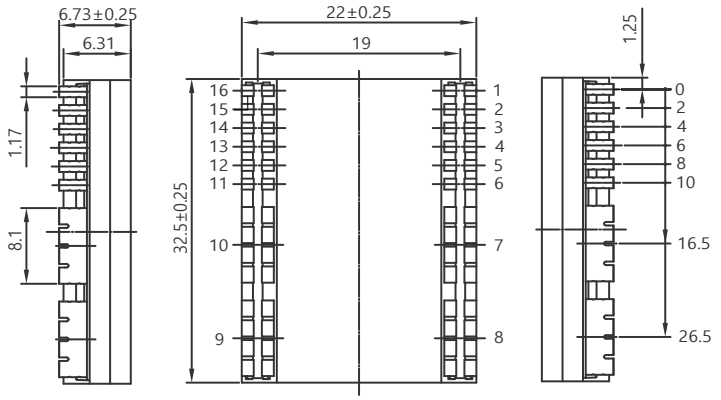
- Wide input and wide output
- Maximum volume power density: 817.3W/in3
- Maximum weight power density: 37.5 W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 5 parallel expansion
- Cascading JVTM factorized power architecture
- Operating temperature: -55℃~100℃
- FULL CHIP package: 32.5 x22.0x6.73 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

High power density | Low EMI | Parallel | Factorized power architecture

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPRM120F-36M48L	18～60V	48V	26V~55V	2.5A	120W	95.0%	Available
WBPRM240F-36M48L	18～60V	48V	26V~55V	5A	240W	95.0%	In development

Shape & Size



Pin No.	Label	Function	Pin No.	Label	Function
1	VC	VTM control	9	-OUT	Negative output power terminal
2	PC	Primary side controller	10	+OUT	Positive output power terminal
3	TM	NULL	11	CD	Voltage compensation
4	IL	Current limiting setting	12	NC	NULL
5	NC	NULL	13	OS	Output voltage range setting
6	PR	Parallel control	14	SG	Signal GND
7	+IN	Positive input power terminal	15	SC	Secondary side control terminal
8	-IN	Negative input power terminal	16	VH	Auxiliary source

Part Numbering

WB	PRM	120	F	-	36	M	48	L
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type
Wibbow	Pre-regulated microchip series	120: 120W 240: 240W	F: FULL CHIP		36: 18~60V	M: Tc: -55~100°C Ts: -65~100°C H: Tc: -40~100°C Ts: -55~100°C T: Tc: -40~100°C Ts: -40~100°C	48: 26~55V	L: Surface Mount T echnology (SMT) T: Through hole

WBPRM48BF Series ChiP DC-DC Converter

Features

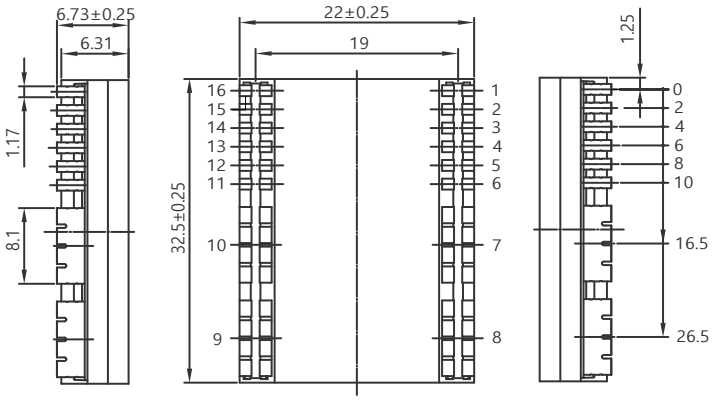
- Adjustable ultra-wide output voltage range
- Maximum volume power density: 2035W/in3
- Maximum weight power density: 37.5 W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 5 parallel expansion
- Cascading JVTM factorized power architecture
- Operating temperature: -55℃~100℃
- FULL CHIP package: 32.5 x22.0x6.73 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

High power density | Low EMI | Parallel | Factorized power architecture

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPRM400F-48BM48L	38～55V	48V	5～55V	8.3A	400W	96.5%	Available
WBPRM500F-48BM48L	38～55V	48V	5～55V	10.4A	500W	97.0%	Available
WBPRM600F-48BM48L	38～55V	48V	5～55V	12.5A	600W	97.0%	Available

Shape & Size



Pin No.	Label	Function	Pin No.	Label	Function
1	PR	Parallel control	9	-OUT	Negative output power terminal
2	PC	Primary side controller	10	+OUT	Positive output power terminal
3	TRIM	Output voltage range setting	11	VC	VTM control
4	NC	NULL	12	RE	Outer ring reference
5	NC	NULL	13	SG	Signal pool
6	AL	Adaptive loop control	14	IF	Current monitoring
7	+IN	Positive input power terminal	15	VS	Auxiliary source
8	-IN	Negative input power terminal	16	VT	VTM temperature compensation

Part Numbering

WB	PRM	400	F	-	48B	M	48	L
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type
Wibbow	Pre-regulated microchip series	400: 400W 500: 500W 600: 600W	F: FULL CHIP		48B: 38~55V	M: T_C: -55~100°C T_S: -65~100°C H: T_C: -40~100°C T_S: -55~100°C T: T_C: -40~100°C T_S: -40~100°C	48: 5~55V	L: Surface Mount Technology (SMT) T: Through hole

WBPRM48CF Series Microchip DC-DC Converter

Product Features

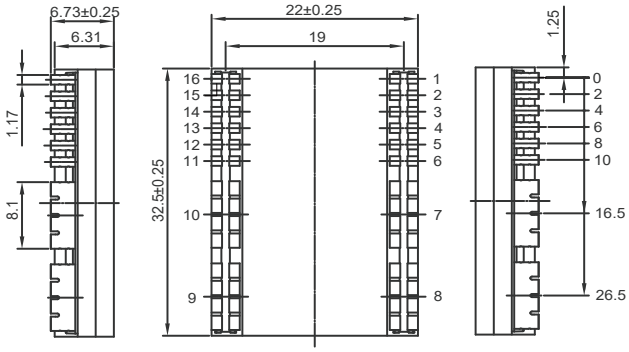
- Ultra-wide output voltage adjustable
- Maximum volume power density: 2035 W/in^3
- Maximum weight power density: 37.5 W/g
- Maximum weight: 16 g only
- Over-voltage, under-voltage, over-current, short circuit, and over-temperature protection
- Support expansion by parallel connection of up to 5 units
- Cascade JVTM composition fractional architecture
- Operating temperature: -55℃~ 100℃
- FULL CHIP package: 32.5× 22.0 × 6.73 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Low EMI | Scalable | Fractional architecture

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBPRM400F-48CM48L	45～55V	48V	5～55V	8.33A	400W	96.5%	Available for delivery
WBPRM500F-48CM48L	45～55V	48V	5～55V	10.4A	500W	97.0%	Available for delivery
WBPRM600F-48CM48L	45～55V	48V	5～55V	12.5A	600W	97.0%	Available for delivery

Overall dimensions



Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	PR	Parallel control	9	-OUT	Output negative terminal
2	PC	Primary side control terminal	10	+OUT	Output positive terminal
3	TRIM	Output voltage setting	11	VC	VTM control
4	NC	Dead	12	RE	Outer loop reference
5	NC	Dead	13	SG	Signal ground
6	AL	Adaptive loop control	14	IF	Current monitoring
7	+IN	Input positive terminal	15	VS	Auxiliary source
8	-IN	Input negative terminal	16	VT	VTM temperature compensation

Naming rule

WB	PRM	400	F	48C	M	48	L
Brand name	Series name	Output power	Package code	Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated voltage regulation Microchip series	400: 400W 500: 500W 600: 600W	F: FULL CHIP	48C: 45~55V	M : T_C : -55~100°C T_S : -65~100°C H: T_C : -40~100°C T_S : -55~100°C T: T_C : -40~100°C T_S : -40~100°C	48: 48V	L: Surface mount

WBPRM48AF Series Microchip DC-DC Converter

Product Features

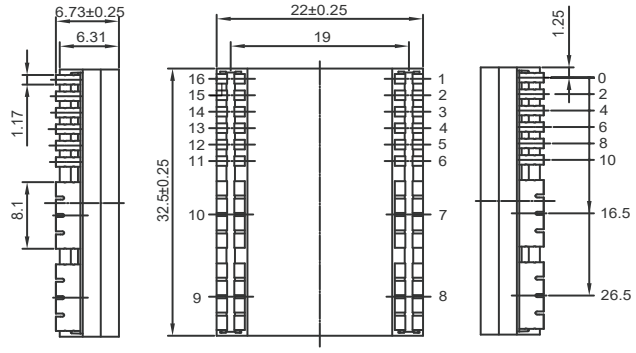
- Wide input wide output
- Maximum volume power density: 2035 W/in^3
- Maximum weight power density: 37.5 W/g
- Weight: 16 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 5 units
- Cascade JVTM composition fractional architecture
- Operating temperature: -55℃~ 100℃
- FULL CHIP package: 32.5× 22.0 × 6.73 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Low EMI | Scalable | Fractional architecture

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBPRM400F-48AM48L	36～75V	48V	20～55V	8.33A	400W	96.5%	Developing
WBPRM500F-48AM48L	36～75V	48V	20～55V	10.4A	500W	97.0%	Developing
WBPRM600F-48AM48L	36～75V	48V	20～55V	12.5A	600W	97.0%	Developing

Overall dimensions



Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	PR	Parallel control	9	-OUT	Output negative terminal
2	PC	Primary side control terminal	10	+OUT	Output positive terminal
3	TRIM	Output voltage setting	11	VC	VTM control
4	NC	Dead	12	RE	Outer loop reference
5	NC	Dead	13	SG	Signal ground
6	AL	Adaptive loop control	14	IF	Current monitoring
7	+IN	Input positive terminal	15	VS	Auxiliary source
8	-IN	Input negative terminal	16	VT	VTM temperature compensation

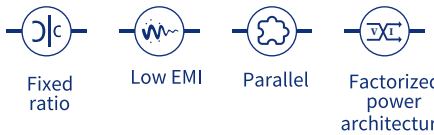
Naming rule

WB	PRM	400	F	48A	M	48	L
Brand name	Series name	Output power	Package code	Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated voltage regulation Microchip series	400: 400W 500: 500W 600: 600W	F: FULL CHIP	48A: 36~75V	M : T_C : -55~100°C T_S : -65~100°C H: T_C : -40~100°C T_S : -55~100°C T: T_C : -40~100°C T_S : -40~100°C	48: 48V	L: Surface mount T: Through hole

WBVTM36F Series ChiP DC-DC Converter

Features

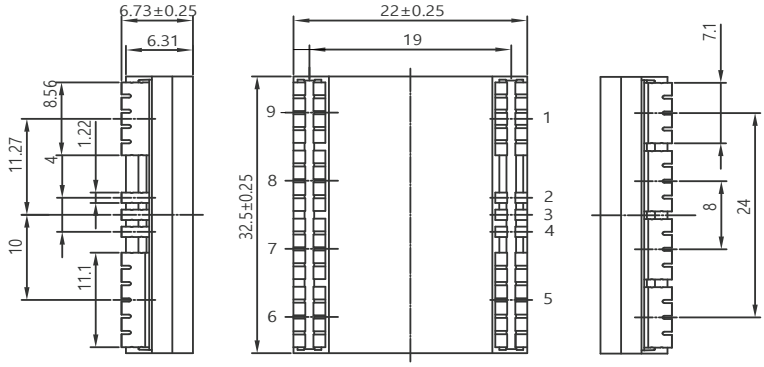
- Isolated fixed voltage ratio
- High volume power density: 557W/in3
- High weight power density: 10.9 W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- Cascading JPRM factorized power architecture
- Operating temperature: -55℃~100℃
- FULL CHIP package: 32.5 x22.0x6.73 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)



Product specification

Product series	Input voltage range	Output voltage range	Conversion ratio	Output current	Output power	Efficiency	Development progress
WBVTM40AF-36M03L	26～50V	3V	12:1	40A	120W	94.0%	In development
WBVTM27AF-36M4V5L	26～50V	4.5V	8:1	27A	120W	94.7%	In development
WBVTM20AF-36M06L	26～50V	6V	6:1	20A	120W	95.0%	Available
WBVTM13AF-36M09L	26～50V	9V	4:1	13A	120W	95.3%	In development
WBVTM10AF-36M12L	26～50V	12V	3:1	10A	120W	94.9%	In development
WBVTM07AF-36M18L	26～50V	18V	2:1	7A	120W	94.0%	In development
WBVTM05AF-36M24L	26～50V	24V	3:2	5A	120W	96.0%	Available
WBVTM03AF-36M36L	36～50V	36V	1:1	3A	120W	95.0%	In development

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TM	Temperature measurement
3	VC	Modular control
4	PC	Primary side control
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

Part Numbering

WB	VTM	40A	F	-	36	M	48	L
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type
Wibbow	Isolated unregulated microchip series	40A: 40A 27A: 27A 20A: 20A 13A: 13A 10A: 10A 07A: 7A 05A: 5A 03A: 3A	F: FULL CHIP		36: 36~50V	M: T_C: -55~100℃ T_S: -65~100℃ H: T_C: -40~100℃ T_S: -55~100℃ T: T_C: -40~100℃ T_S: -40~100℃	03: 3V 4V5: 4.5V 06: 6V 09: 9V 12: 12V 18: 18V 24: 24V 36: 36V	L: Surface Mount Technology (SMT) T: Through hole

WBVTM48F Series Microchip DC-DC Converter

Product Features

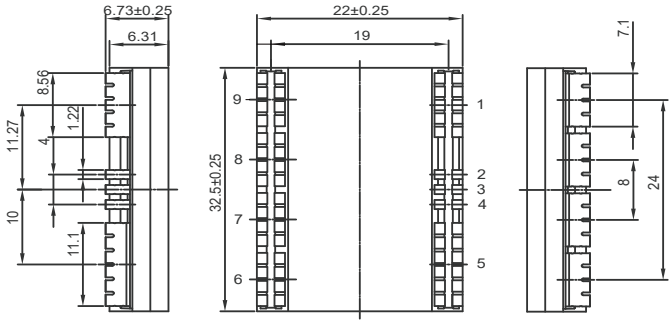
- Isolated fixed voltage ratio
- High volume power density: 1114 W/in^3
- High weight power density: 22 W/g
- Weight: 16 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- Cascade JPRM composition fractional architecture
- Operating temperature: -55℃~ 100℃
- FULL CHIP package: 32.5× 22.0 × 6.73 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

Fixed transformation ratio | Low EMI | Scalable | Fractional architecture

Product specification

Specification and model	Input voltage	Output voltage	Voltage transformation ratio	Output current	Output power	Efficiency	Development progress
WBVTM50AF-48M04L	26～55V	4V	12：1	50A	200W	94.0%	Developing
WBVTM40AF-48M06L	26～55V	6V	8：1	40A	240W	94.6%	Available for delivery
WBVTM30AF-48M08L	26～55V	8V	6：1	30A	240W	95.4%	Available for delivery
WBVTM25AF-48M9V6L	26～55V	9.6V	5：1	25A	240W	95.8%	Developing
WBVTM25AF-48M12L	26～55V	12V	4：1	25A	300W	95.8%	Available for delivery
WBVTM15AF-48M16L	26～55V	16V	3：1	15A	240W	95.0%	Available for delivery
WBVTM12A5F-48M24L	26～55V	24V	2：1	12.5A	300W	95.5%	Developing
WBVTM09A5F-48M32L	26～55V	32V	3：2	9.5A	300W	96.2%	Developing

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TM	Temperature detection
3	VC	Module control
4	PC	Primary side control
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Naming rule

WB	VTM	50A	F	48	M	04	L
Brand name	Series name	Output current	Package code	Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated non-stabilized microchip series	50A: 50A 40A: 40A 30A: 30A 25A: 25A 15A: 15A 12A: 12A 09A: 9A	F: FULL CHIP	48: 26~55V	M : T_C : -55~100℃ T_S : -65~100℃ H: T_C : -40~100℃ T_S : -55~100℃ T: T_C : -40~100℃ T_S : -40~100℃	04: 4V 06: 6V 08: 8V 9V6: 9.6V 12: 12V 16: 16V 24: 24V 32: 32V	L: Surface mount T: Through hole

WBBCM48BF Series ChiP DC-DC Converter

Features

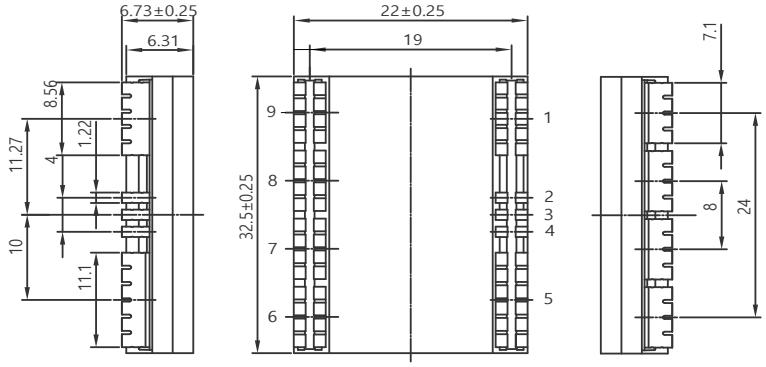
- Isolated fixed voltage ratio
- High volume power density: 1114W/in3
- High weight power density: 22WWg
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- Operating temperature: -55℃~100℃
- FULL CHIP package: 32.5 x22.0x6.73 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

High power density | Fixed ratio | Low EMI | Parallel

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBBCM50AF-48BM04L	38～55V	4V	12:1	50A	200W	94.1%	In development
WBBCM40AF-48BM06L	38～55V	6V	8:1	40A	240W	94.7%	Available
WBBCM30AF-48BM08L	38～55V	8V	6:1	30A	240W	95.6%	Available
WBBCM25AF-48BM9V6L	38～55V	9.6V	5:1	25A	240W	95.8%	In development
WBBCM25AF-48BM12L	38～55V	12V	4:1	25A	300W	96.0%	Available
WBBCM15AF-48BM16L	38～55V	16V	3:1	15A	240W	95.3%	Available
WBBCM12A5F-48BM24L	38～55V	24V	2:1	12.5A	300W	95.5%	In development
WBBCM09AF-48BM32L	38～55V	32V	3:2	9.5A	300W	96.2%	In development

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TM	Temperature measurement
3	RSV	NULL
4	PC	Primary side control
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

Part Numbering

WB	BCM	50A	F	-	48B	M	04	L
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type
Wibbow	Isolated unregulated microchip series	50A: 50A 40A: 40A 30A: 30A 25A: 25A 15A: 15A 12A: 12A 09A: 9A	F: FULL CHIP		48B: 38~55V	M: T_C: -55~100°C T_S: -65~100°C H: T_C: -40~100°C T_S: -55~100°C T: T_C: -40~100°C T_S: -40~100°C	04: 4V 06: 6V 08: 8V 9V6: 9.6V 12: 12V 16: 16V 24: 24V 32: 32V	L: Surface Mount Technology (SMT) T: Through hole

WBBCM384WEC Series Microchip DC-DC Converter

Product Features

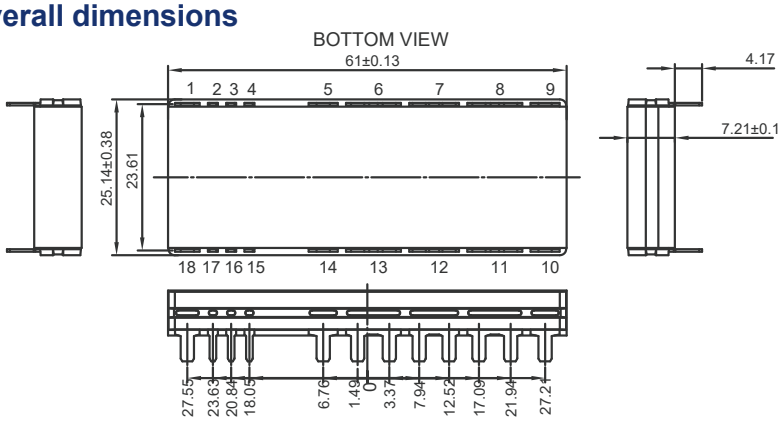
- High voltage wide input isolated fixed transformation ratio
- High volume power density: 2352 W/in^3
- High weight power density: 40 W/g
- Weight: 41 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- Support bidirectional operation
- Operating temperature: -55℃~ 100℃
- CHIP6123 package: 61.0× 25.14 × 7.21 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Fixed transformation ratio | Low EMI | Scalable

Product specification

Specification and model	Input voltage	Output voltage	Voltage transformation ratio	Output current	Output power	Efficiency	Development progress
WBBCM68AEC-384WM12T	260～410V	12V	32：1	68A	816W	97.1%	Available for delivery
WBBCM125AEC-384WM12T	260～410V	12V	32：1	125A	1500W	96.4%	Available for delivery
WBBCM62A5EC-384WM12T	260～410V	24V	16：1	62.5A	1500W	96.5%	Available for delivery

Overall dimensions



Pin No.	Symbol	Function
1	-IN	Input negative terminal
2	VAUX	Auxiliary source terminal
3	EN	Enable terminal
4	TM	Temperature monitoring terminal
5,7,9,10,12,14	+OUT	Output positive terminal
6,8,11,13	-OUT	Output negative terminal
15,16,17,18	+IN	Input positive terminal

Naming rule

WB	BCM	68A	EC	384W	M	12	T
Brand name	Series name	Output current	Package code	Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated non-stabilized microchip series	68A: 68A 125A: 125A 62A5: 62A5	EC: CHIP6123 (Through hole from long edge)	384W: 260-410V	M : T_C : -55~100℃ T_S : -65~100℃ H: T_C : -40~100℃ T_S : -55~100℃ T: T_C : -40~100℃ T_S : -40~100℃	12: 12V	T: Through hole

WBBCM384WDC Series ChiP DC-DC Converter

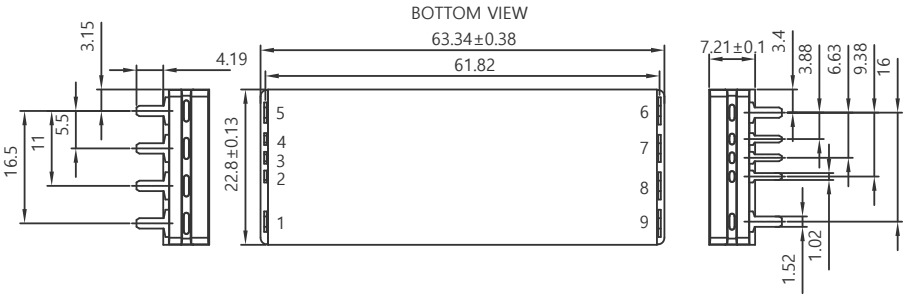
Features

- High-voltage wide-input isolated fixed ratio
- High volume power density: 2735W/in3
- High weight power density: 42.7 W/g
- Weight: only 41 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- Two-way operation
- Operating temperature: -55℃~100℃
- Package: 63.3 x22.8x7.21 mm
  Comply with the General Specification for Microcircuit Modules (SJ20668)

Product specification

Product series	Input voltage range	Output voltage range	Voltage variation	Output current	Output power	Efficiency	Development progress
WBBCM17ADC-384WM48T	260～410V	48V	8:1	17A	816W	97.5%	Available
WBBCM26ADC-384WM48T	260～410V	48V	8:1	26A	1248W	97.4%	Available
WBBCM35ADC-384WM48T	260～410V	48V	8:1	35A	1680W	96.6%	Available

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TM	Temperature measurement terminal
3	EN	Enables and disables power supply
4	VAUX	Auxiliary source
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

Part Numbering

WB	BCM	17A	DC	-	384W	M	48	T
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type
Wibbow	Isolated unregulated microchip series	17A: 17A 26A: 26A 35A: 35A	DC: CHIP6123 (Pin-out on short side)		384W: 260~410V	M: T_C: -55~100°C T_S: -65~100°C H: T_C: -40~100°C T_S: -55~100°C T: T_C: -40~100°C T_S: -40~100°C	48: 48V	T: Through hole

WBBCM384EC Series ChiP DC-DC Converter

Features

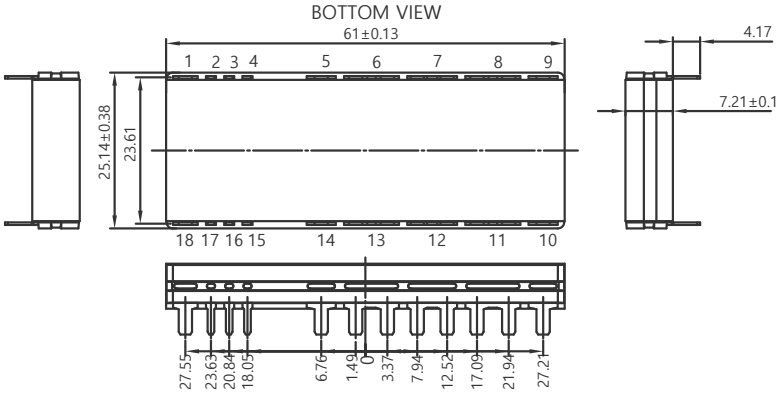
- High-voltage wide-input isolated fixed ratio
- High volume power density: 2352W/in3
- High weight power density: 40 W/g
- Weight: only 41 g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- Two-way operation
- Operating temperature: -55℃~100℃
- Package: 61 x25.14x7.21 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

High power density | Fixed ratio | Low EMI | Parallel

Product specification

Product series	Input voltage range	Output voltage range	Voltage variation	Output current	Output power	Efficiency	Development progress
WBBCM68AEC-384M12T	360～400V	12V	32:1	68A	816W	97.1%	Available
WBBCM125AEC-384M12T	360～400V	12V	32:1	125A	1500W	96.4%	Available
WBBCM62A5EC-384M12T	360～400V	24V	16:1	62.5A	1500W	96.5%	Available

Shape & Size



Pin No.	Label	Function
1	-IN	Negative input power terminal
2	VAUX	Auxiliary source
3	EN	Enables and disables power supply
4	TM	Temperature monitoring terminal
5,7,9,10,12,14	+OUT	Positive output power terminal
6,8,11,13	-OUT	Negative output power terinalm
15,16,17,18	+IN	Positive input power terminal

Part Numbering

WB	BCM	68A	EC	-	384	M	12	T
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type
Wibbow	Isolated unregulated microchip series	68A: 12A 125A: 125A 65A5: 62.5A	EC: CHIP6123 (Pin-out on long side)		384: 360~400V	M: Tc: -55~100°C Ts: -65~100°C H: Tc: -40~100°C Ts: -55~100°C T: Tc: -40~100°C Ts: -40~100°C	12: 12V	T: Through hole

WBBCM384DC Series Microchip DC-DC Converter

Product Features

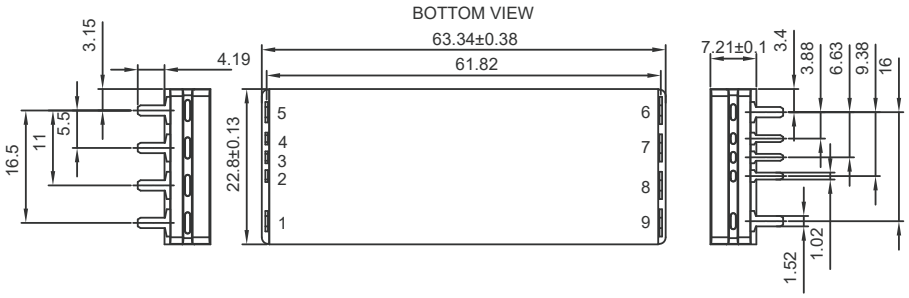
- High voltage wide input isolated fixed transformation ratio
- High volume power density: 2735 W/in^3
- High weight power density: 42.7 W/g
- Weight: 41 g only
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- Support bidirectional operation
- Operating temperature: -55℃~ 100℃
- CHIP6123 package: 63.3× 22.8 × 7.21 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

High power density | Fixed transformation ratio | Low EMI | Scalable

Product specification

Specification and model	Input voltage	Output voltage	Voltage transformation ratio	Output current	Output power	Efficiency	Development progress
WBBCM17ADC-384M48T	360～400V	48V	8:1	17A	816W	97.5%	Available for delivery
WBBCM26ADC-384M48T	360～400V	48V	8:1	26A	1248W	97.4%	Available for delivery
WBBCM35ADC-384M48T	360～400V	48V	8:1	35A	1680W	96.6%	Available for delivery

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TM	Temperature detection terminal
3	EN	Enable terminal
4	VAUX	Auxiliary source terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Naming rule

WB	BCM	17A	DC	-	384	M	48	T
Brand name	Series name	Output current	Package code		Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated non-stabilized microchip series	17A: 17A 26A: 26A 35A: 35A	DC: CHIP6123 (Through hole from short edge)		384: 360-400V	M : T_C : -55~100℃ T_S : -65~100℃ H: T_C : -40~100℃ T_S : -55~100℃ T: T_C : -40~100℃ T_S : -40~100℃	12: 12V	T: Plug-in installation

WBDCM270AFL Series Microchip DC-DC Converter

Product Features

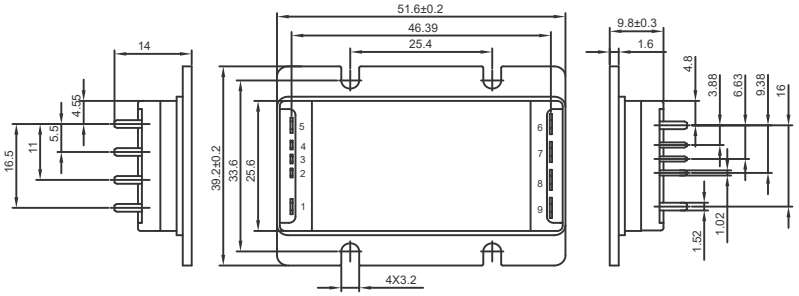
- Metal casing reinforced cooling
- Wide input isolated voltage regulation: 160V~420V
- High volume power density: 612 W/in^3
- Weight: 45 g
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- 4242 Vdc dielectric strength
- Operating temperature: -55℃~ 90℃
- 4623 metal flange package: 65.0× 27.2 × 9.8 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

Strong cooling | High power | Low EMI | Isolated voltage regulation

Product specification

Specification and model	Input voltage	Optput voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBDCM150AFL-270M3V3T	160～420V	3.3V	3.0～3.6V	45.46A	150W	87.7%	Developing
WBDCM250AFL-270M05T	160～420V	5V	4.0～5.5V	50A	250W	89.1%	Developing
WBDCM500AFL-270M12T	160～420V	12V	7.2～13.2V	41.67A	500W	91.1%	Available for delivery
WBDCM500AFL-270M15T	160～420V	15V	9.0~16.5V	33.4A	500W	91.8%	Available for delivery
WBDCM500AFL-270M24T	160～420V	24V	14.4~26.4V	20.84A	500W	92.6%	Available for delivery
WBDCM500AFL-270M28T	160～420V	28V	16.8~30.8V	17.86A	500W	93.2%	Available for delivery
WBDCM500AFL-270M48T	160～420V	48V	28.8~52.8V	10.42A	500W	92.0%	Developing

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable terminal
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

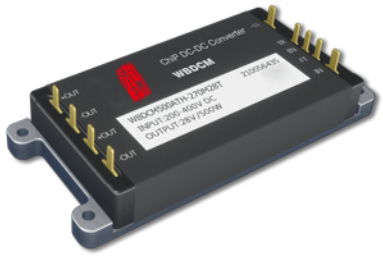
Naming rule

WB	DCM	150	AFL	-	270	M	3V3	T
Brand name	Series name	Output current	Package code		Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated voltage regulation Microchip series	150: 150W 250: 250W 500: 500W	AFL: 4623 metal flange housing		270：160~420V	M : T_C : -55~100℃ T_S : -65~100℃ H: T_C : -40~100℃ T_S : -55~100℃ T: T_C : -40~100℃ T_S : -40~100℃	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	T: Through hole

WBDCM270ATH Series ChiP DC-DC Converter

Features

- Enhanced cooling by metal case
- Wide-input isolated voltage regulation: 160V-420V
- High volume power density: 578W/in3
- Weight: 46g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- 4242Vdc isolation
- Operating temperature: -55℃~90℃
- 4623 metal flange package: 65.0 x27.2 x9.8 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

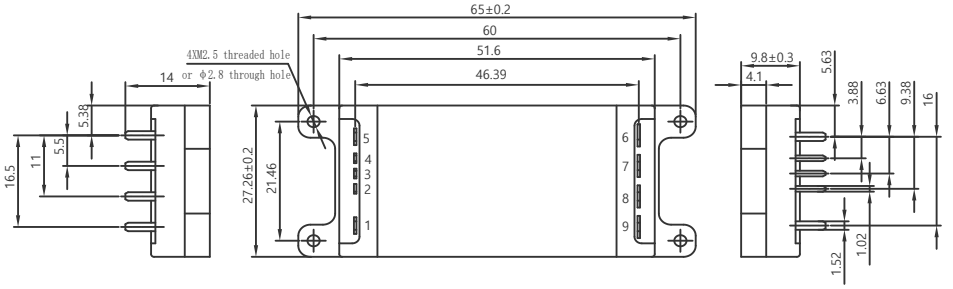


Enhanced cooling | High power | Low EMI | Isolated, Regulated

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM150ATH-270M3V3T	160～420V	3.3V	3.0～3.6V	45.46A	150W	87.7%	In development
WBDCM250ATH-270M05T	160～420V	5V	4.0～5.5V	50A	250W	89.1%	In development
WBDCM500ATH-270M12T	160～420V	12V	7.2～13.2V	41.67A	500W	91.1%	Available
WBDCM500ATH-270M15T	160～420V	15V	9.0~16.5V	33.4A	500W	91.8%	Available
WBDCM500ATH-270M24T	160～420V	24V	14.4~26.4V	20.84A	500W	92.6%	Available
WBDCM500ATH-270M28T	160～420V	28V	16.8~30.8V	17.86A	500W	93.2%	Available
WBDCM500ATH-270M48T	160～420V	48V	28.8~52.8V	10.42A	500W	92.0%	In development

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TR	Adjusts output voltage
3	EN	Enables and disables power supply
4	FT	Fault monitoring
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

Part Numbering

WB	DCM	150	ATH	-	270	M	3V3	T	P
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type	Paralleling
Wibbow	Isolated and regulated microchip series	150: 150W 250: 250W 500: 500W	ATH: 4623 Metal thread casing		270: 160 ~ 420V	M: Tc: -55~100°C Ts: -65~100°C H: Tc: -40~100°C Ts: -55~100°C T: Tc: -40~100°C Ts: -40~100°C	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	T: Through hole	P: Parallel S: Operate stand-alone

WBDCM300AFL Series ChiP DC-DC Converter

Features

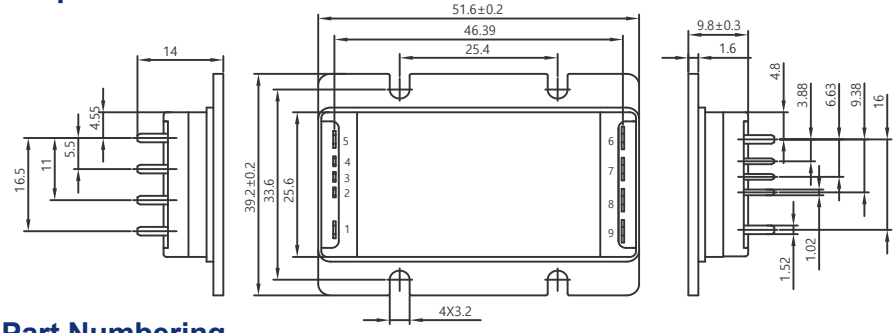
- Enhanced cooling by metal case
- Wide-input isolated voltage regulation: 200V-420V
- High volume power density: 612W/in3
- Weight: 45g
- Over-voltage, under-voltage, over-current, short-circuit and thermal protections
- Supports 8 parallel expansion
- 4242Vdc isolation
- Operating temperature: -55℃~90℃
- 4623 metal flange package: 65.0 x27.2 x9.8 mm
- Comply with the General Specification for Microcircuit Modules (SJ20668)

Enhanced cooling | High power | Low EMI | Isolated, Regulated

Product specification

Product series	Input voltage range	Output voltage range	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM150AFL-300M3V3TP	200«420V	3.3V	3.0«3.6V	45.46A	150W	87.7%	In development
WBDCM250AFL-300M05TP	200«420V	5V	4.0«5.5V	50A	250W	89.1%	In development
WBDCM500AFL-300M12TP	200«420V	12V	7.2«13.2V	41.67A	500W	91.1%	Available
WBDCM500AFL-300M15TP	200«420V	15V	9.0~16.5V	33.4A	500W	91.8%	Available
WBDCM500AFL-300M24TP	200«420V	24V	14.4~26.4V	20.84A	500W	92.6%	Available
WBDCM500AFL-300M28TP	200«420V	28V	16.8~30.8V	17.86A	500W	93.2%	Available
WBDCM500AFL-300M48TP	200«420V	48V	28.8~52.8V	10.42A	500W	92.0%	In development
WBDCM600AFL-300M24TP	200«420V	24V	14.4~26.4V	25A	600W	92.6%	Available

Shape & Size



Pin No.	Label	Function
1	+IN	Positive input power terminal
2	TR	Adjusts output voltage
3	EN	Enables and disables power supply
4	FT	Fault monitoring
5	-IN	Negative input power terminal
6	-OUT	Negative output power terminal
7	+OUT	Positive output power terminal
8	-OUT	Negative output power terminal
9	+OUT	Positive output power terminal

Part Numbering

WB	DCM	150	AFL	-	300	M	3V3	T	P
Brand Name	Series name	Output	Package Type	-	Input voltage range	Temperature Grade	Output voltage range	Pin Type	Paralleling
Wibbow	Isolated and regulated microchip series	150: 150W 250: 250W 500: 500W 600: 600W	AFL: 4623 Metal flange case		300: 200 ~ 420V	M: Tc: -55~100°C Ts: -65~100°C H: Tc: -40~100°C Ts: -55~100°C T: Tc: -40~100°C Ts: -40~100°C	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	T: Through hole	P: Parallel S: Operate stand-alone

WBDCM300ATH Series Microchip DC-DC Converter

Product Features

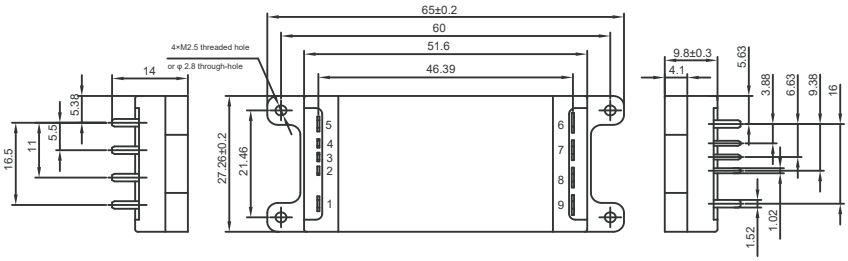
- Metal casing reinforced cooling
- Wide input isolated voltage regulation: 200V~420V
- High volume power density: 578 W/in3
- Weight: 46 g
- Over-voltage, under-voltage, over-current, short circuit, and overtemperature protection
- Support expansion by parallel connection of up to 8 units
- 4242 Vdc dielectric strength
- Operating temperature: -55℃~ 90℃
- 4623 metal flange package: 65.0× 27.2 × 9.8 mm
- Conform to SJ 20668 General Specification for Microcircuit Modules

Strong cooling | High power | Low EMI | Isolated voltage regulation

Product specification

Specification and model	Input voltage	Output voltage	Adjustment range	Output current	Output power	Efficiency	Development progress
WBDCM150ATH-300M3V3T	200～420V	3.3V	3.0～3.6	45.46A	150W	87.7%	Developing
WBDCM250ATH-300M05T	200～420V	5V	4.0～5.5	50A	250W	89.1%	Developing
WBDCM500ATH-300M12T	200～420V	12V	7.2～13.2	41.67A	500W	91.1%	Available for delivery
WBDCM500ATH-300M15T	200～420V	15V	9.016.5	33.4A	500W	91.8%	Available for delivery
WBDCM500ATH-300M24T	200～420V	24V	14.426.4	20.84A	500W	92.6%	Available for delivery
WBDCM500ATH-300M28T	200～420V	28V	16.830.8	17.86A	500W	93.2%	Available for delivery
WBDCM500ATH-300M48T	200～420V	48V	28.852.8	10.42A	500W	92.0%	Developing
WBDCM600ATH-300M24T	200～420V	24V	14.426.4	25A	600W	92.6%	Available for delivery

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable terminal
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Naming rule

WB	DCM	150	ATH	-	300	M	3V3	T
Brand name	Series name	Output current	Package code		Input voltage	Temperature grade	Output voltage	Through hole type
Wibbow	Isolated voltage regulation Microchip series	150: 150W 250: 250W 500: 500W 600: 600W	ATH: 4623 metal threaded housing		300: 200~420V	M : Tc : -55~100℃ Ts : -65~100℃ H: Tc : -40~100℃ Ts : -55~100℃ T: Tc : -40~100℃ Ts : -40~100℃	3V3: 3.3V 05: 5V 12: 12V 15: 15V 24: 24V 28: 28V 48: 48V	T: Through hole