Datasheet

LDG&LDGH&LDM Series

DC-DC Half-Brick Converter

Features

- **Industry standard “Half-Brick” footprint**
- **Up to 30A output current**
- **High efficiency up to 94.5%**
- **Low output ripple and noise**
- **Excellent thermal performance**
- **Adjustable output voltage(-50%~+15%Vo)**
- **IUVP, OVP, OTP,OCP, SCP**
- **RoHS2.0**

General Specifications

Input Characteristics

Parameter	Specifications
Input voltage Note①	18-36Vdc
	36-72Vdc
	36-75Vdc
	66-154Vdc
Remote Control Note②	Positive(Blank),Negative(P)

General Characteristics

Parameter	Specifications
Efficiency	94.5%(max.)
Operating ambient temperature	-40℃-+85℃
Storage temperature	-55℃-+125℃
Switching frequency	200-450kHz
Temperature coefficient	200PPM
Isolation voltage	1500Vdc
Isolation resistance	30MΩ (min.)
Safety	IEC/UL/EN 60950-1, GB4943
MTBF	400khours min.
Packaging	Through-Hole

Output Characteristic

Parameter	Specifications
Output power Note①	75-700W
Output voltage Note①	5//12/15/24/28/48/50Vdc
Output voltage precision	±3%
Output voltage trim logic Note②	正逻辑(S),负逻辑(空)
Output voltage adjustment range	-50%~+15%Vo
Line regulation	±0.2%
Load regulation	±0.5%
Dynamic response	±3.0%Vo/250us@25%-50%-75% Io(max.) di/dt=2.5A/μs
Ripple and noise	120mV(typ.)

Protection Characteristic

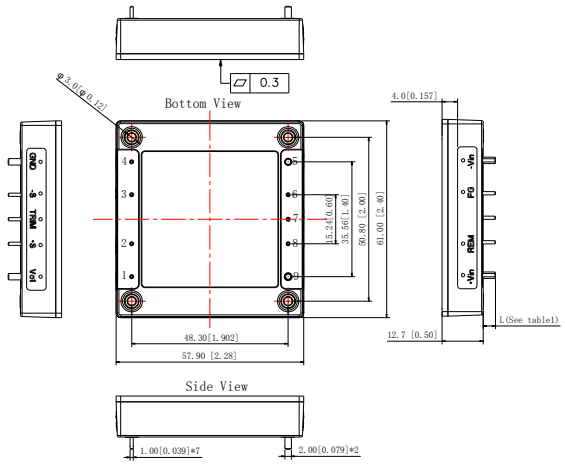
Parameter	Specifications
Input under voltage protection	Yes
Output over voltage protection	Hiccup mode Automatic recovery
Over current protection	Hiccup mode Automatic recovery
Short circuit protection	Hiccup mode Automatic recovery
Over temperature protection	Hiccup mode Automatic recovery

Note① Refer to order-information list in the following page for specific values of input and output

Note② Refer to the production naming rules

Outline Diagram (Unit:mm[inch])

LDM500-48S50CGS



Pin Designations

Pin No.	Symbol	Function
1	+Vin	Positive input voltage
2	REM	Remote control
3	FG	Case
4	-Vin	Negative input voltage
5	GND	Negative output voltage
6	- ENSE	Negative remote compensate
7	TRIM	Output voltage trim
8	+SENSE	Positive remote compensate
9	Vo1	Positive output voltage

Order information

MPN	Input voltage	Output voltage	Output current	Power	Efficiency	Physical Dimensions
LDG75-24S48-107H	18-36Vdc	48Vdc	1.5A	75W	89%	Half-Brick
LDG100-24S15	18-36Vdc	15Vdc	6.7A	100W	90%	Half-Brick
LDG100-24S48	18-36Vdc	48Vdc	2.1A	100W	89%	Half-Brick
LDG100-48S12-107H	36-72Vdc	12Vdc	8.3A	100W	90%	Half-Brick
LDG150-110S24-A	66-154Vdc	24Vdc	6.25A	150W	85%	Half-Brick
LDG150-48S12	36-72Vdc	12Vdc	12.5A	150W	87%	Half-Brick
LDG150-48S15S	36-72Vdc	15Vdc	10A	150W	91%	Half-Brick
LDM150-48S5	36-72Vdc	5Vdc	30A	150W	88%	Half-Brick
LDGH300-48S24PS	36-72Vdc	24Vdc	12.5A	300W	87%	Half-Brick
LDGH380-24S48S	18-36Vdc	48Vdc	8A	384W	91%	Half-Brick
LDGH450-48S28GPSZ3	36-75Vdc	28Vdc	16A	448W	94.5%	Half-Brick
LDGH450-48S48CGPS	36-75Vdc	48Vdc	9.4A	450W	94%	Half-Brick
LDM500-48S50CGS	36-75Vdc	50Vdc	10A	500W	94.5%	Half-Brick
LDM500-48S50GPS	36-75Vdc	50Vdc	10A	500W	94.5%	Half-Brick
LDM500-48S24CGS	36-75Vdc	24Vdc	21A	504W	94.5%	Half-Brick
LDGH700-48S28CGSZ3	36-75Vdc	28Vdc	25A	700W	94%	Half-Brick
LDGH700-48S28GPSZ3	36-75Vdc	28Vdc	25A	700W	94%	Half-Brick
LDGH700-48S50CGSZ3	36-75Vdc	50Vdc	14A	700W	94%	Half-Brick
LDGH700-48S50GPSZ3	36-75Vdc	50Vdc	14A	700W	94%	Half-Brick

Note: All information contained in this datasheet is subject to change without notice, please visit our official website www.suplet.com for the latest information and refer to the user manual for more details.