

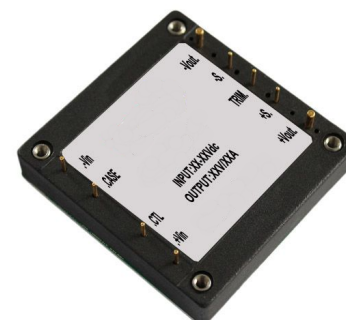


## 75W DC-DC converter(1/2brick)



### Typical Performance

- ⊙Wide Input voltage range (2: 1/4:1)
- ⊙Typical Efficiency:85%
- ⊙Switching frequency: 300KHz
- ⊙Output Overcurrent protect,Short circuit protection
- ⊙input under voltage protection
- ⊙input-output isolated
- ⊙PCB Board in-line type installs
- ⊙High reliability
- ⊙Optional heat sink



**Technology parameter** Test condition:General Nominal Line,Tc=25°C , Rated resistant load unless other wispecified

Input Features	Min	Nom	Max	Notes
	Test condition			
Start voltage	24V(18~36Vin)			18V
	48V(36~72Vin)			36V
	110V(72~144Vin)			72V
	18V(9~36V)			10V
Input under voltage protection	24V(18~36Vin)			17V
	48V(36~72Vin)			35V
	110V(72~144Vin)			71V
	18V(9~36V)			8V
Input voltage (Vdc)	9	12	18	W 2:1
	18	24	36	W 2:1
	36	48	72	W 2:1
	72	110	144	W 2:1
	9	18	36	W 4: 1

	18	36	72	W 4: 1
Start time	Not capacitive load			20mS
<b>Remote On/Off Function</b>				
CTL	CNT Pin connect -Vin			OFF
	CNT Pin left open			ON
<b>Output Feature</b>				
	Test condition			
Voltage accuracy	$I_o=0.1...1.0 \times I_{onom}, V_i=V_{rated}$			$\pm 1.0\%$
Line regulation	$V_{imin} \leq V_i \leq V_{imax}$			$\pm 0.2\%$
Load regulation	$I_o=0.1...1.0 \times I_{onom}, V_{imin} \leq V_i \leq V_{imax}, V_i=V_{rated}$			$\pm 0.5\%$
Ripple&noise	2-MHz Broadband			1%
Over current protection	$V_{imin} \leq V_i \leq V_{imax}$			120%
Peak Deviation	25% Rated Load Vary			$\pm 5.0\%$
Dynamic Response Setting Time				400us
Output Voltage Trim	$V_{imin} \leq V_i \leq V_{imax}$			10%
Switching frequency	$V_{imin} \leq V_i \leq V_{imax}$			300KHz
<b>General Feature</b>				
	Test condition			
Efficiency				85% typical
Board temperature	Industry level			-25°C ~ +55°C
Working environment temperature	Military level			-25°C ~ +85°C
Max Board temperature	Industry level			+85°C
	Military level			+105°C
Storage temperature	Industry level			-40°C ~ +105°C
	Military level			-50°C ~ +105°C
Relative humidity	No condensation			5%~90%RH
Temperature coefficient				$\pm 0.02\%/^{\circ}\text{C}$
case material				aluminium baseplate
Isolated resistance	Input-Output			100M ohm
Vibration resistance	10~55Hz			5G

Over current mode	Full input range	Protection type : Hiccup mode, recovers automatically	
Cooling		Heatsink,nature cooling	
Case material		epoxy,Aluminum base plate	
Isolated Voltage	Input-output 1500Vdc; input-FG 1500Vdc,Output-FG 500Vdc		
MTBF	MIL-HDBK-217F2		5X10 <sup>6</sup> Hrs

### Product Nomination Method

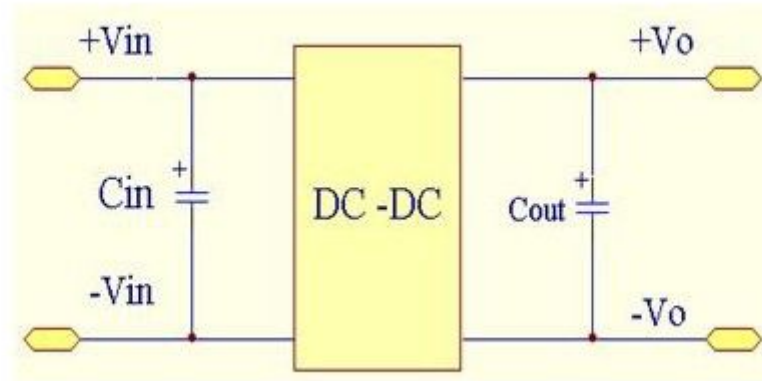
example	SL D 200 – Q 48 S 12		
	① ② ③	④ ⑤ ⑥	⑦
①	Wide input voltage: 2: 1	④	G:1/2 brick package
②	Power adaptation mode: D (DC-DC)	⑤	Normal input voltage
③	Output power(W)	⑥	S=Single route output
⑦	output voltage		

### Product Program

PART #	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	A	V	A	V	A
SLD75Q-12S2V5	12V(9~18V)	2.5V	30A				
SLD75Q-12S3V3		3.3V	22.7A				
SLD75Q-12S05		5V	15A				
SLD75Q-12S12		12V	6.25A				
SLD75Q-12S15		15V	5A				
SLD75Q-12S24		24V	3.125A				
SLD75Q-12S28		28V	2.6A				
SLD75Q-12S48		48V	1.5A				
SLD75Q-18S2V5	18V(9~36V)	2.5V	30A				
SLD75Q-18S3V3		3.3V	22.7A				
SLD75Q-18S05		5V	15A				
SLD75Q-18S12		12V	6.25A				
SLD75Q-18S15		15V	5A				
SLD75Q-18S24		24V	3.125A				
SLD75Q-18S28		28V	2.6A				
SLD75Q-18S48		48V	1.5A				
SLD75Q-24S2V5	24 V(18~36V)	2.5V	30A				

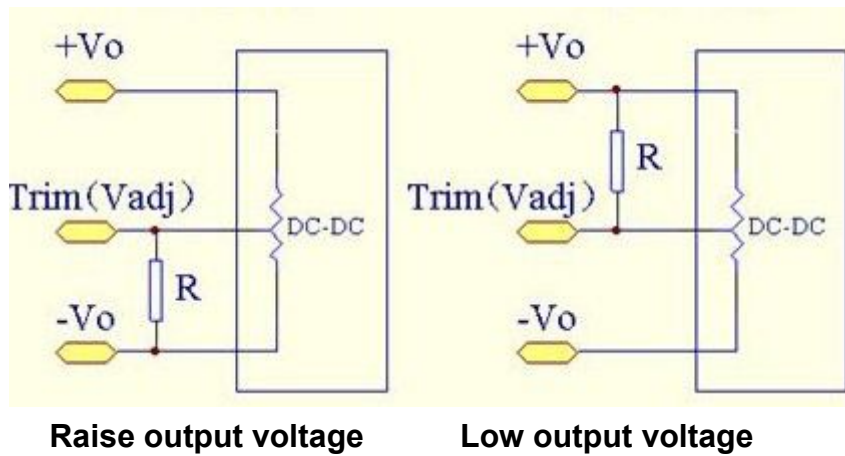
SLD75Q-24S3V3		3.3V	22.7A				
SLD75Q-24S05		5V	15A				
SLD75Q-24S12		12V	6.25A				
SLD75Q-24S15		15V	5A				
SLD75Q-24S24		24V	3.125A				
SLD75Q-24S28		28V	2.6A				
SLD75Q-24S48		48V	1.5A				
SLD75Q-48S2V5	48 V(36~72V)	2.5V	30A				
SLD75Q-48S3V3		3.3V	22.7A				
SLD75Q-48S05		5V	15A				
SLD75Q-48S12		12V	6.25A				
SLD75Q-48S15		15V	5A				
SLD75Q-48S24		24V	3.125A				
SLD75Q-48S28		28V	2.6A				
SLD75Q-48S48		48V	1.5A				
SLD75Q-36S05	36V(18~72V)	5V	15A				
SLD75Q-36S12		12V	6.25A				
SLD75Q-36S15		15V	5A				
SLD75Q-36S24		24V	3.125A				
SLD75Q-36S28		28V	2.6A				
SLD75Q-36S48		48V	1.5A				
SLD75Q-110S2V5	110V(72~144V)	2.5V	30A				
SLD75Q-110S3V3		3.3V	22.7A				
SLD75Q-110S05		5V	15A				
SLD75Q-110S12		12V	6.25A				
SLD75Q-110S15		15V	5A				
SLD75Q-110S24		24V	3.125A				
SLD75Q-110S28		28V	2.6A				
SLD75Q-110S48		48V	1.5A				

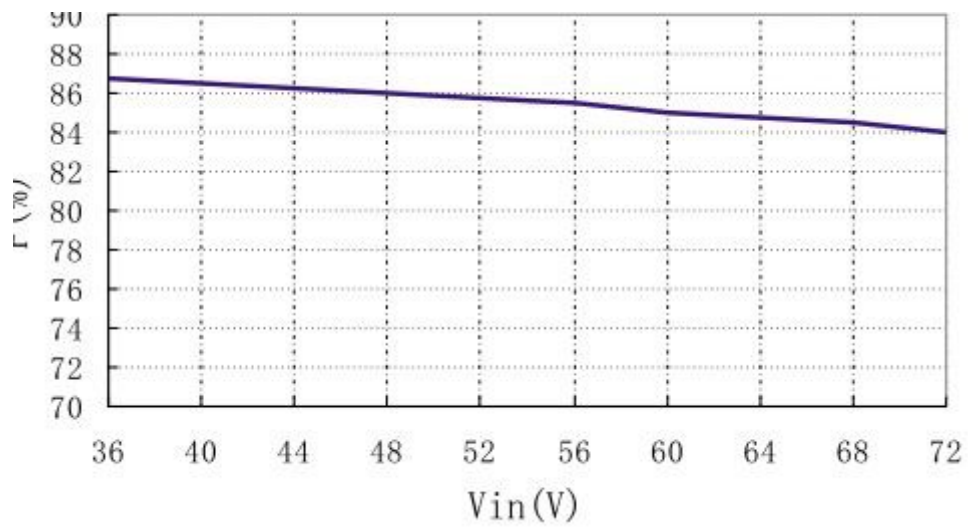
Recommended Circuit



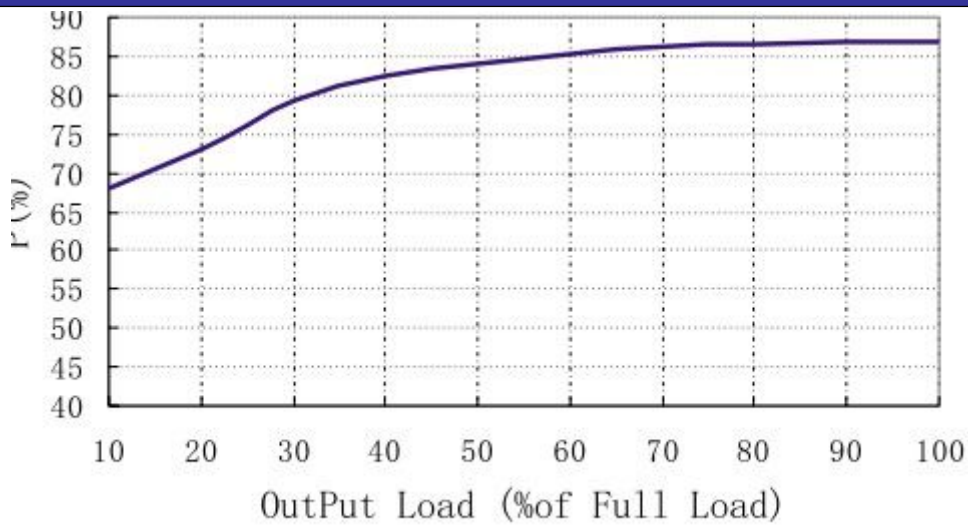
- (1) Power module with  $C_{in}$  is helpful to improve the electromagnetic compatibility, it is recommended to use  $47\ \mu\text{F} \sim 100\ \mu\text{F}$  electrolytic capacitor
- (2) Power module with  $C_{out}$  is helpful to lower the output ripple
- (3) Power module output connects the digital circuit needs to add  $C_{out}$
- (4)  $C_{out}$  is recommended to use  $100\ \mu\text{F}/\text{A}$ , the current is refers to the output current

## TRIM

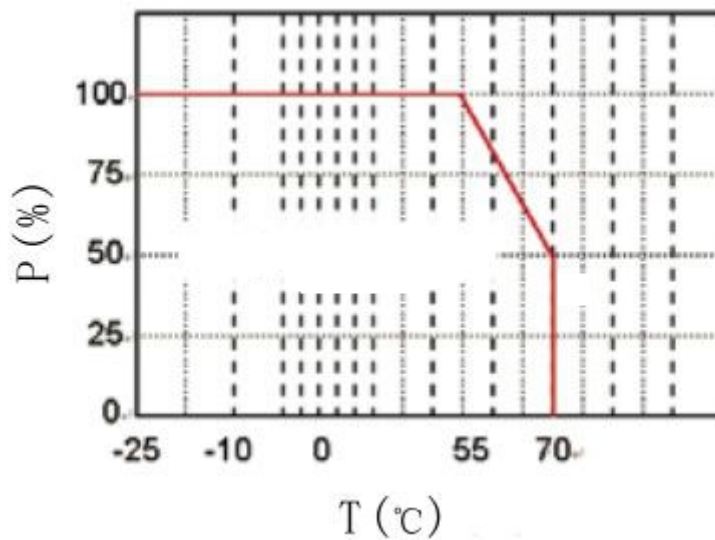




### Output Load--Efficiency

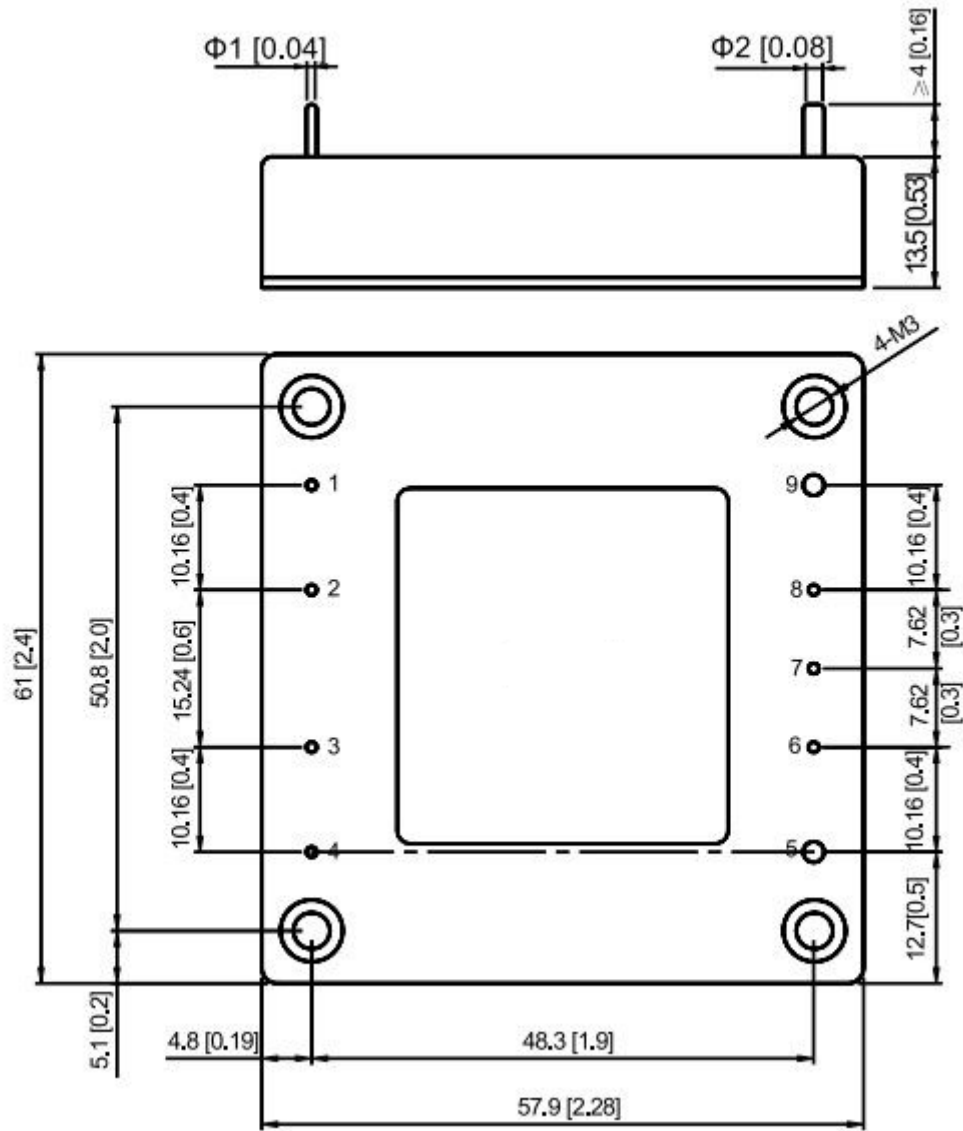


### Temperature Curve



### Mechanical Dimension

Unit:mm(inch)



TOP VIEW

Unit:mm(inch)

Tolerance:±0.2mm(±0.008inch)

### Mechanical Data

Packing	L x W x H	Packing No.
1/2 Brick	57.90x 61.00 x 12.70mm	

### Pin Assignment

Pin	1	2	3	4	5	6	7	8	9	
S	-Vin	CASE	CTL	+Vin	+Vout	+S	TRIM	-S	-Vout	

\*Note: The power modules such as the definition of the pin does not match with the hand book, please refer to the actual item.