

FEATURES:

- Wide input range 4:1
- Continuous short-circuit protection, self recover
- I/O isolation voltage 1.5KV
- Working temperature: -40℃~+85℃
- Switching frequency 280KHz
- Stable performance and high reliability (MTBF≥2X10⁵Hrs)
- Low standby power consumption
- Metal case
- Efficiency up to 90%
- Input under-voltage, output over-voltage, short-circuit and over current protection



Selection Guide

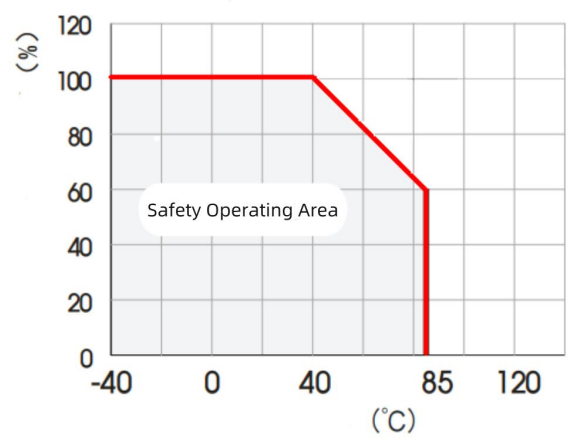
Part No.	INPUT		OUTPUT				Capacitive Load(μF)
	Normal (Vdc)	Range (Vdc)	Voltage (V1dc)	current (mA)	Voltage (V2dc)	current (mA)	
URB2405LD-30WR3	24	9-36	5	0	6000	86	2000
URB2412LD-30WR3			12	0	2500	90	680
URB2415LD-30WR3			15	0	2000	90	470
URB2424LD-30WR3			24	0	1250	90	330
URA2405LD-30WR3			+5	+3000	-15	3000	1000
URA2412LD-30WR3			+12	+1250	-12	1250	330
URA2415LD-30WR3			+15	+1000	-15	1000	220
URA2424LD-30WR3			+24	+625	-24	625	150
URB4805LD-30WR3	48	18-75	5	0	6000	86	2000
URB4812LD-30WR3			12	0	2500	90	680
URB4815LD-30WR3			15	0	2000	90	470
URB4824LD-30WR3			24	0	1250	90	330
URA4805LD-30WR3			+5	+3000	-15	3000	1000
URA4812LD-30WR3			+12	+1250	-12	1250	330
URA4815LD-30WR3			+15	+1000	-15	1000	220
URA4824LD-30WR3			+24	+625	-24	625	150
URB1D05LD-30WR3			5	0	6000	86	2000
URB1D12LD-30WR3			12	0	2500	90	680
URB1D15LD-30WR3			15	0	2000	90	470
URB1D24LD-30WR3			24	0	1250	90	330
URA1D05LD-30WR3			+5	+3000	-15	3000	1000
URA1D12LD-30WR3			+12	+1250	-12	1250	330
URA1D15LD-30WR3			+15	+1000	-15	1000	220
URA1D24LD-30WR3			+24	+625	-24	625	150

customized accepted, pls contact sales for details

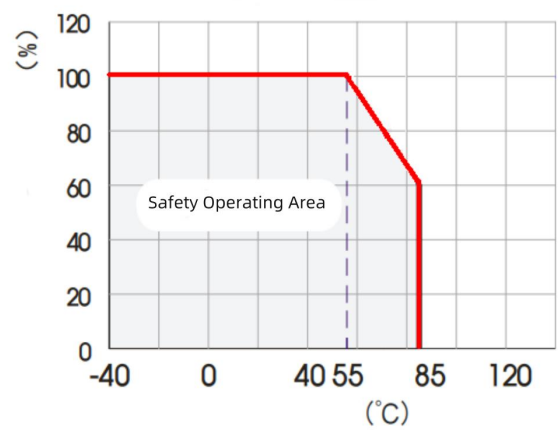
Input Specifications

Input Voltage Range	Nom(Vdc)	Max (Vdc)
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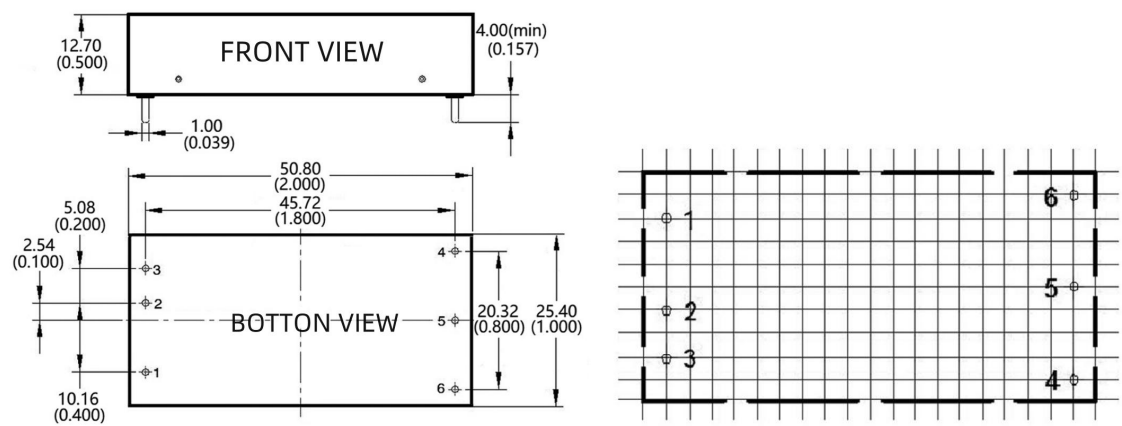
Input Voltage		(Vdc)		
		9-36	24	36
		18-75	48	75
		40-160	110	160
Hot Plug		Unavailable		
Output Specifications				
Item		Typ	Max	Test Conditions
Voltage Accuracy	+Vo	±1%	±2%	0-100% load
	-Vo	±2%	±3%	
Line Regulation	+Vo	±0.2%	±0.5%	Input voltage variation from low to high at full load
	-Vo	±0.5%	±1%	
Load Regulation	+Vo	±0.5%	±1%	5%-100% load
	-Vo	±0.5%	±1.5%	
Ripple&Noise		60mVp-p	80mVp-p	20MHz bandwidth, 5%-100% load
Startup delay time		50ms	-	
Over-voltage Protection		-	160%Vo	110%Vo(Min)
Over-load Protection		-	200%Io	110%Io(Min)
Short-circuit Protection		Continuous, self-recovery		
Transient Response Deviation		5Vout	≤5%TYP; ≤8%MAX,Instant recovery	25% load step change, nominal input
		Other output	≤3%TYP; ≤5%MAX,Instant recovery	
Output voltage adjustment range		≥±10% Vo		
Output the start-up overshoot voltage			≤2%Vo	
Gernal Specifications				
Switching Frequency		280KHz(Typ)		
MTBF		2X10 ⁵ Hrs		MIL-HDBK-217F@25℃
Isolation (Input-Output)		1.5KVDC		
Operating Temperature		-40~+85℃		
Storage Temperature		-55~+125℃		
Storage Humidity		5-95%RH		Non-condensing
Cooling Method		Free air convection		
Case Material		Aluminum alloy		
Weight		28g (Typ)		
**Unless specified, otherwise all other parameters are tested under the following conditions: nominal input voltage, pure resistive load, 25℃ room temperature environment.				
Temperature derating curve				
5V Dual output				



Other output



Dimensions and Recommended Layout



Unit:mm(inch)

Pins

Pin	Single	Dual	
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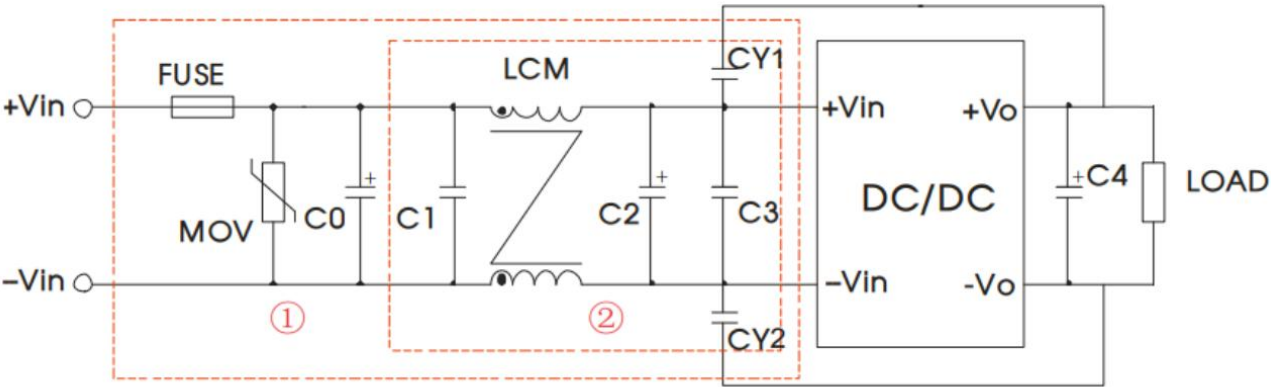
1	CTRL	CTRL	
2	-Vin	-Vin	
3	+Vin	+Vin	
4	+Vo	+Vo	
5	-Vo	COM	
6	TRIM	-Vo	

Recommended Circuit



Vout (VDC)	Cin (μF)	Cout (μF)
5	100μF/50V	220uF/16V
12/15		100μF/50V
24		47μF/50V

EMC Recommend Circuit



	Vin:18-72V	Vin:18-72V	Vin:40-160V
MOV	14D560K	14D101K	14D221K
C0、C2Electrolytic capacitor	470uF/50V	470uF/100V	68uF/200V
C1、C3,Ceramic capacitor	1uF/50V	1uF/100V	1uF/250V
LCM	4.7mH	6.8mH	10mH
CY1、CY2,safety capacitor	2.2nF/2000V	2.2nF/2000V	2.2nF/2000V
C4 Electrolytic capacitor	100uF/50V	100uF/50V	100uF/50V
Fuse	according to the customer's requirements		

Note

- 1. The product should be used within the specified range; otherwise, it may cause permanent damage to the product.
- 2. If the product operates beyond its load range, it cannot be guaranteed that all performance indicators of the product comply with those in this manual.
- 3. Unless otherwise specified, all the above data were measured at Ta=25℃, humidity <75%, input nominal voltage and

output rated load (pure resistance load).

4. The above are all performance indicators of the product models listed in this manual. Some indicators of non-standard models may exceed the above requirements. For specific situations, you can directly contact our technical personnel.

5. Product specification changes will not be notified separately. Please pay attention to the latest manual published on our company's official website.

*The final interpretation right of the product belongs to ECCO ELECTRONICS.