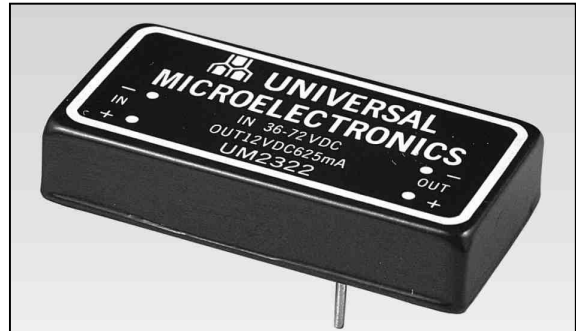


UM2300 SERIES

7.5 Watt DC-DC Converters

- ◆ 2:1 Input Range
- ◆ Efficiency to 82%
- ◆ Pi Input Filter
- ◆ Short Circuit Protection
- ◆ 200KHz Switching Frequency
- ◆ Six-Sided Shield
- ◆ Conductive EMI Meets CISPR22 Class A



SPECIFICATIONS

All specifications are typical at nominal line, full load and 25°C unless otherwise noted.

OUTPUT SPECIFICATIONS

Voltage Accuracy:	
Single Output	±1% max.
Dual, + Output	±1% max.
- Output	±1% max.
Voltage Balance, Dual Output at Full Load	
.....	±1% max.
Transient Response	
Single, 25% step load change	<200 u sec.
Dual, FL-1/2FL, ±1% Error Band	<200 u sec.
Ripple and Noise, 20MHz-BW	75mV P-P max.
Temperature Coefficient	±0.02%/°C max.
Short Circuit Protection	Continuous
Line Regulation ¹	±0.2% max.
Load Regulation ² , Single Output	±0.5% max.
Dual Output	±1.0% max.

GENERAL SPECIFICATIONS

Efficiency	See Table
Isolation Voltage	1500 VDC min.
Isolation Resistance	10 ⁸ ohms min.
Switching Frequency	200 KHz
Operating Temperature Range,	
Ambient, None Derating	-25°C to +71°C
Cooling	Free Air Convection
Storage Temperature Range	-55°C to +105°C
EMI/RFI	Six-Sided Continuous Shield
Dimensions	2*1*0.4 inches
	(50.8*25.4*10.2 mm)
Case Material ³	Black-Coated Copper with
	Non-Conductive Base
Weight	30g

INPUT SPECIFICATIONS

Input Voltage Range, 12V	9-18V
24V	18-36V
48V	36-72V
Input Filter	Pi Network



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UM2300

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REV.2

NOTES

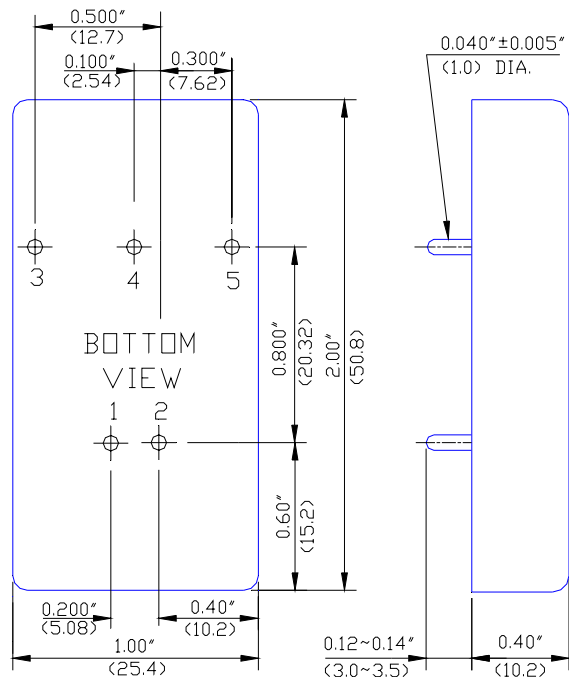
1. Measured from high line to low line.
2. Measured from full load to 1/4 full load (single).
Measured from full load to 1/2 full load (dual).
3. Metal case only.

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MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF	CASE
				NO LOAD	FULL LOAD		
UM2301	12 VDC	5 VDC	1500 mA	45 mA	850 mA	74	B
UM2302		12 VDC	625 mA	45 mA	815 mA	77	
UM2303		15 VDC	500 mA	45 mA	815 mA	77	
UM2305		±12 VDC	±310 mA	45 mA	810 mA	77	
UM2306		±15 VDC	±250 mA	45 mA	810 mA	77	
UM2309		3.3 VDC	1500 mA	45 mA	590 mA	70	
UM2311	24 VDC	5 VDC	1500 mA	30 mA	400 mA	78	B
UM2312		12 VDC	625 mA	30 mA	380 mA	82	
UM2313		15 VDC	500 mA	30 mA	380 mA	82	
UM2315		±12 VDC	±310 mA	30 mA	385 mA	81	
UM2316		±15 VDC	±250 mA	30 mA	385 mA	81	
UM2319		3.3 VDC	1500 mA	30 mA	280 mA	74	
UM2321	48 VDC	5 VDC	1500 mA	25 mA	195 mA	80	B
UM2322		12 VDC	625 mA	25 mA	195 mA	81	
UM2323		15 VDC	500 mA	25 mA	195 mA	81	
UM2325		±12 VDC	±310 mA	25 mA	190 mA	82	
UM2326		±15 VDC	±250 mA	25 mA	190 mA	82	
UM2329		3.3 VDC	1500 mA	25 mA	135 mA	76	

NOTES:1. Maximum capacitive load across the output ports should not be over following indicated values.

MODEL NUMBER	UM 2301	UM 2302	UM 2303	UM 2305	UM 2306	UM 2309	UM 2311	UM 2312	UM 2313	UM 2315	UM 2316	UM 2319	UM 2321	UM 2322	UM 2323	UM 2325	UM 2326	UM 2329
Maximum ¹ CAPACITIVE LOAD (uF)	+1500	+220	+150	+47 -47	+47 -47	+1500	+1500	+220	+150	+47 -47	+47 -47	+1500	+1500	+220	+150	+47 -47	+47 -47	+1500



Pin Connections	
Pin	Function
1	+Input
2	-Input
3	+Output
4	Common/NP*
5	-Output

*NP (No Pin) on single output models.

All dimensions in inches (mm).

Tolerance .xx=±0.04" .xxx=±0.010"



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