

UM2000-3W SERIES

3 Watt DC-DC Converter

- 24 Pin Dip Package
- High Efficiency (up to 80%)
- Regulated Outputs
- Pi Input Filter
- 500 VDC Isolation
- Continuous Short Circuit Protection

SPECIFICATIONS

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

OUTPUT SPECIFICATIONS

Voltage Accuracy $\pm 2.0\%$ max.
Voltage Balance (Dual)¹ $\pm 2.0\%$ max.
Ripple and Noise, 20MHz BW, 5V 100mVp-p max.
12/15V 1% p-p max.
Temperature Coefficient $\pm 0.05\%/^{\circ}\text{C}$
Short Circuit Protection Continuous
Line Regulation² $\pm 0.5\%$
Load Regulation³ $\pm 0.5\%$

GENERAL SPECIFICATIONS

Efficiency See Table
Isolation Voltage 500 VDC min.
Isolation Resistance 10^8 ohms min.
Switching Frequency 100 KHz-850KHz
(Depending on Loading)
Operating Temperature Range
Ambient, None Derating -25°C to $+71^{\circ}\text{C}$
Cooling Free Air Convection
Storage Temperature Range -40°C to $+100^{\circ}\text{C}$
Dimensions CASE A 1.25*0.8*0.4 inches
(31.8*20.3*10.2mm)
Case Material
Standard Models Non-Conductive Black Plastic
UL94V-0
Weight 15g

INPUT SPECIFICATIONS

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

NOTES:

1. For common output models.
2. Measured from high line to low line.
3. Measured from full load to 10% load.



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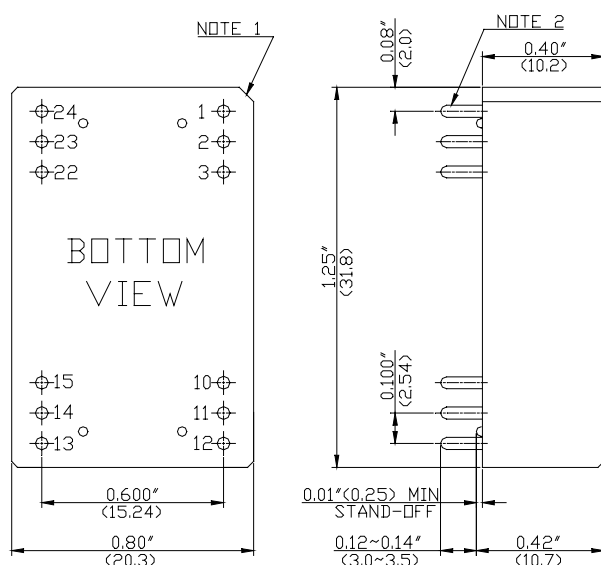
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MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE	EFFICIENCY
				NO LOAD	FULL LOAD		
UM2011-3W	12 VDC	5 VDC	600 mA	50 mA	343 mA	A	73%
UM2012-3W		12 VDC	250 mA	50 mA	334 mA		75%
UM2013-3W		15 VDC	200 mA	50 mA	334 mA		75%
UM2014C-3W		± 5 VDC	± 300 mA	50 mA	343 mA		73%
UM2015C-3W		±12 VDC	± 125 mA	70 mA	338 mA		74%
UM2016C-3W		±15 VDC	± 100 mA	80 mA	338 mA		74%
UM2017-3W		9 VDC	333 mA	50 mA	333 mA		75%
UM2021-3W	24 VDC	5 VDC	600 mA	30 mA	167 mA	A	75%
UM2022-3W		12 VDC	250 mA	30 mA	161 mA		78%
UM2023-3W		15 VDC	200 mA	30 mA	161 mA		78%
UM2024C-3W		± 5 VDC	± 300 mA	35 mA	167 mA		75%
UM2025C-3W		±12 VDC	± 125 mA	35 mA	163 mA		77%
UM2026C-3W		±15 VDC	± 100 mA	35 mA	163 mA		77%
UM2027-3W		9 VDC	333 mA	30 mA	160 mA		78%
UM2031-3W	48 VDC	5 VDC	600 mA	5 mA	84 mA	A	75%
UM2032-3W		12 VDC	250 mA	10 mA	79 mA		80%
UM2033-3W		15 VDC	200 mA	10 mA	79 mA		80%
UM2034C-3W		± 5 VDC	± 300 mA	10 mA	84 mA		75%
UM2035C-3W		±12 VDC	± 125 mA	15 mA	81 mA		78%
UM2036C-3W		±15 VDC	± 100 mA	15 mA	81 mA		78%
UM2037-3W		9 VDC	333 mA	10 mA	78 mA		80%

MODEL NUMBER	UM2011-3W	UM2012-3W	UM2013-3W	UM2014C-3W	UM2015C-3W	UM2016C-3W	UM2017-3W
	UM2021-3W	UM2022-3W	UM2023-3W	UM2024C-3W	UM2025C-3W	UM2026C-3W	UM2027-3W
	UM2031-3W	UM2032-3W	UM2033-3W	UM2034C-3W	UM2035C-3W	UM2036C-3W	UM2037-3W
MAXIMUM ¹ CAPACITIVE LOAD	120uF	47uF	39uF	+56uF -56uF	+22uF -22uF	+18uF -18uF	68uF

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

CASE A



PIN CONNECTIONS		
Pin	Single Output	Dual Output
1	+V Input	+V Input
2	NC*	-V Output
3	NC*	Common
10	-V Output	Common
11	+V Output	+V Output
12	-V Input	-V Input
13	-V Input	-V Input
14	+V Output	+V Output
15	-V Output	Common
22	NC*	Common
23	NC*	-V Output
24	+V Input	+V Input

* NC (NO Connection)

All dimensions in inches(mm).

Note 1: Cut-corner marking for Pin No.1

Note 2: Pin size is 0.020±0.005 inch(0.5mm) dia.

Or 0.020*0.012 inch

Note 3: Tolerance .xx =±0.02

.xxx=±0.010



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