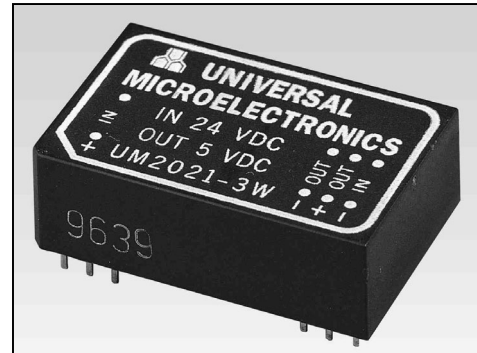


UM2000-3W SERIES

3 Watt DC-DC Converters

- ◆ 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 | ±2.0% max. |
| Voltage Balance (Dual) ¹ | ±2.0% max. |
| Ripple and Noise, 20MHz BW, 3.3V | 60mVp-p max. |
| 5V | 100mVp-p max. |
| 12/15V | 1% p-p max. |
| Temperature Coefficient | ±0.05%/°C |
| Short Circuit Protection | Continuous |
| Line Regulation ² | ±0.5% |
| Load Regulation ³ | ±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°C |
| Cooling | Free Air Convection |
| Storage Temperature Range | -40°C to +100°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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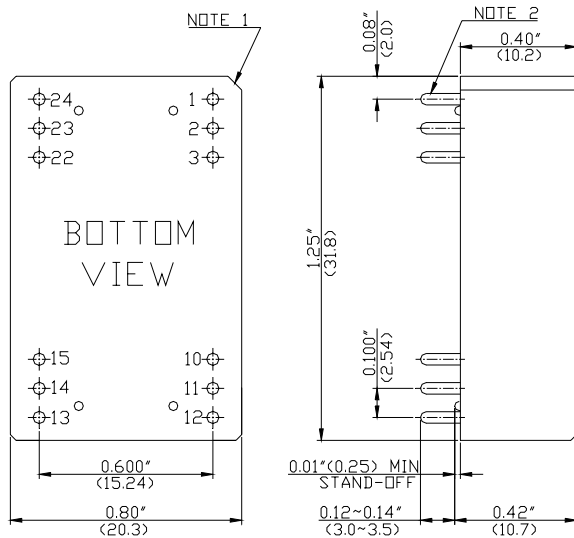
2539 W. 237TH STREET, SUITE A,
TORRANCE, CA 90505
TEL: (310) 326-7072 FAX: (310) 326-7058

| 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% |
| UM2039-3W | | 3.3 VDC | 500 mA | 5 mA | 48 mA | | 73% |

| MODEL NUMBER | UM2011-3W UM2021-3W UM2031-3W UM2039-3W | UM2012-3W UM2022-3W UM2032-3W | UM2013-3W UM2023-3W UM2033-3W | UM2014C-3W UM2024C-3W UM2034C-3W | UM2015C-3W UM2025C-3W UM2035C-3W | UM2016C-3W UM2026C-3W UM2036C-3W | UM2017-3W UM2027-3W UM2037-3W |
|---|--|-------------------------------------|-------------------------------------|--|--|--|-------------------------------------|
| MAXIMUM ¹ CAPACITIVE LOAD (uF) | 120 | 47 | 39 | +56 -56 | +22 -22 | +18 -18 | 68 |

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 inches (0.5mm) dia.

Or 0.020*0.012 inch

Note 3: Tolerance .xx =±0.04"

.xxx=±0.010"



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