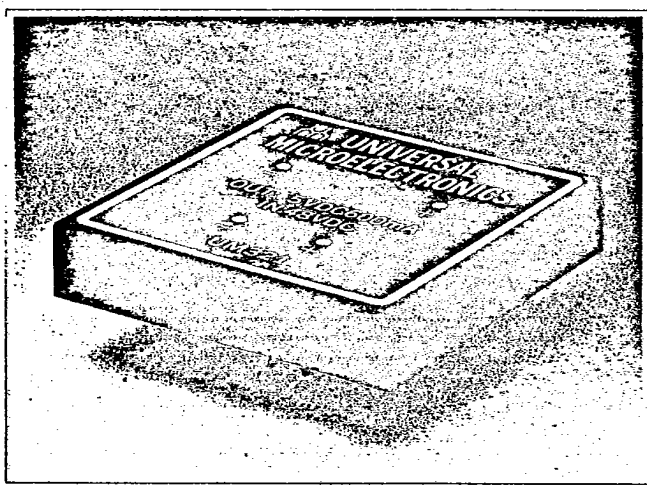


# 3 Watt DC-DC Converters

## UM 300 SERIES



- 60% Efficiency
- Regulated Outputs
- Pi Input Filter
- Low Ripple and Noise
- 500 VDC Isolation
- Short Circuit Protection

### SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted.

### INPUT SPECIFICATIONS

- Input Voltage Range ..... ± 10%
- Input Filter ..... Pi Network

### OUTPUT SPECIFICATIONS

- Voltage Accuracy ..... ± 1.0% max.
- Voltage Balance, Dual Output ..... ± 0.5%
- Temperature Coefficient
  - Single Output ..... ± 0.02%/°C
  - Dual Output ..... ± 0.01%/°C
- Ripple and Noise, 20MHz BW
  - Single Output ..... 50mV P-P max.
  - Dual Output ..... 35mV P-P max.
- Short Circuit Protection ..... Short Term
- Line Regulation ..... 0.02%
- Load Regulation ..... 0.05%

### GENERAL SPECIFICATIONS

- Efficiency ..... 60%
- Isolation Voltage ..... 500 VDC min.
- Isolation Capacitance ..... 80pF
- Isolation Resistance ..... 10<sup>9</sup> ohms
- Switching Frequency ..... 20kHz, min.
- Operating Temperature Range ..... - 25°C to + 71°C
- Storage Temperature Range ..... - 40°C to + 100°C
- EMI/RFI ..... Six-Sided Continuous Shield
- Dimensions ..... 2 × 2 × 0.4 inches  
(50.8 × 50.8 × 10.2 mm)

#### Case Material

- Standard Models ..... Non-Conductive Black Plastic
- Suffix "M" Models ..... Black Coated Copper with Non-Conductive Base

NOTE: 1. Metal Case Only.



8004-8416

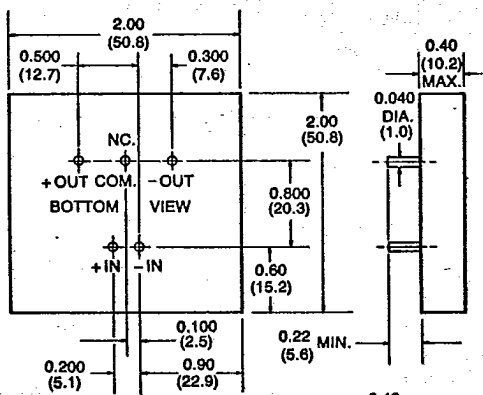
# UNIVERSAL MICROELECTRONICS

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE	ALT <sup>T</sup> PIN OUT
				NO LOAD	FULL LOAD		
UM301	5 VDC	5 VDC	600 mA	50 mA	1000 mA	C	S
UM302	5 VDC	12 VDC	250 mA	60 mA	900 mA	C	S
UM303	5 VDC	15 VDC	200 mA	70 mA	900 mA	C	S
UM304	5 VDC	± 12 VDC	± 125 mA	120 mA	900 mA	C	S
UM305	5 VDC	± 15 VDC	± 100 mA	130 mA	900 mA	C	S
UM306	12 VDC	5 VDC	600 mA	35 mA	420 mA	C	S
UM307	12 VDC	12 VDC	250 mA	35 mA	370 mA	C	S
UM308	12 VDC	15 VDC	200 mA	35 mA	370 mA	C	S
UM309	12 VDC	± 12 VDC	± 125 mA	50 mA	370 mA	C	S
UM310	12 VDC	± 15 VDC	± 100 mA	50 mA	370 mA	C	S
UM311	24 VDC	5 VDC	600 mA	20 mA	210 mA	C	S
UM312	24 VDC	12 VDC	250 mA	20 mA	180 mA	C	S
UM313	24 VDC	15 VDC	200 mA	20 mA	180 mA	C	S
UM314	24 VDC	± 12 VDC	± 125 mA	35 mA	180 mA	C	S
UM315	24 VDC	± 15 VDC	± 100 mA	35 mA	180 mA	C	S
UM316	28 VDC	5 VDC	600 mA	20 mA	180 mA	C	S
UM317	28 VDC	12 VDC	250 mA	20 mA	155 mA	C	S
UM318	28 VDC	15 VDC	200 mA	20 mA	155 mA	C	S
UM319	28 VDC	± 12 VDC	± 125 mA	35 mA	155 mA	C	S
UM320	28 VDC	± 15 VDC	± 100 mA	35 mA	155 mA	C	S
UM321	48 VDC	5 VDC	600 mA	14 mA	100 mA	C	S
UM322	48 VDC	12 VDC	250 mA	14 mA	90 mA	C	S
UM323	48 VDC	15 VDC	200 mA	14 mA	90 mA	C	S
UM324	48 VDC	± 12 VDC	± 125 mA	20 mA	90 mA	C	S
UM325	48 VDC	± 15 VDC	± 100 mA	20 mA	90 mA	C	S

NOTE: 1. Alternate pin-out version. To order, suffix an "S" to the standard model number.  
 For example, UM301S, UM321S, etc. See case drawing below.

### CASE C

STANDARD PIN CONFIGURATION



ALTERNATE PIN CONFIGURATION SUFFIX S

\* NC(NO CONNECTION) ON SINGLE OUTPUT MODELS

ALL DIMENSIONS IN INCHES (MM)

