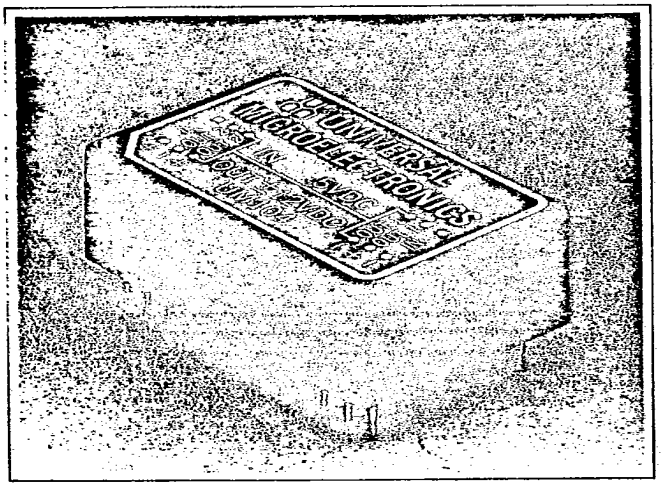
0.5 to 1 Watt DC-DC Converters

UM 100 SERIES



- 24-Pin DIP Package
- 50% Efficiency
- Regulated Outputs
- Pi Input Filter
- Low Ripple and Noise
- 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	±5% max.
Temperature Coefficient	±0.1%/°C
Ripple and Noise, 20MHz BW[1]	20mV P-P max.
Short Circuit Protection	Short Term
Line Regulation	±0.3%
Load Regulation	±0.4%

GENERAL SPECIFICATIONS

Efficiency	50%
Isolation Voltage	500VDC min.
Isolation Capacitance	30pF
Isolation Resistance	10^9 ohms
Switching Frequency	20kHz, min.
Operating Temperature Range	−25°C to +71°C
Storage Temperature Range	−40°C to +100°c
Dimensions	1.25 × 0.8 × 0.4 inches (31.8 × 20.3 × 10.2mm)
Case Material	
Standard Models	Non-Conductive Black Plastic
Suffix "M" Models	Black Coated Copper with Non-Conductive Base

NOTE:
1. 15 μF Tantalum Capacitor Across Each Output.

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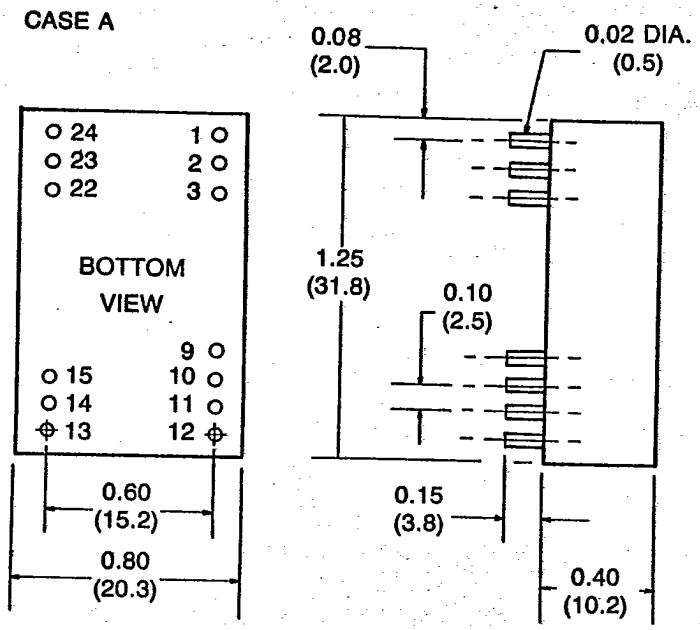
MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
				NO LOAD	FULL LOAD	
UM101	5 VDC	5 VDC	100 mA	60 mA	220 mA	A
UM102	5 VDC	12 VDC	80 mA	70 mA	350 mA	A
UM103	5 VDC	15 VDC	65 mA	80 mA	350 mA	A
UM104	5 VDC	±12 VDC	±40 mA	85 mA	365 mA	A
UM105	5 VDC	±15 VDC	±33 mA	90 mA	380 mA	A
UM106	12 VDC	5 VDC	100 mA	30 mA	90 mA	A
UM107	12 VDC	12 VDC	80 mA	30 mA	145 mA	A
UM108	12 VDC	15 VDC	65 mA	35 mA	145 mA	A
UM1C9	12 VDC	±12 VDC	±40 mA	35 mA	150 mA	A
UM110	12 VDC	±15 VDC	±33 mA	40 mA	150 mA	A

CASE A



ALL DIMENSION IN INCHES (MM)

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) ON SINGLE OUTPUT MODELS