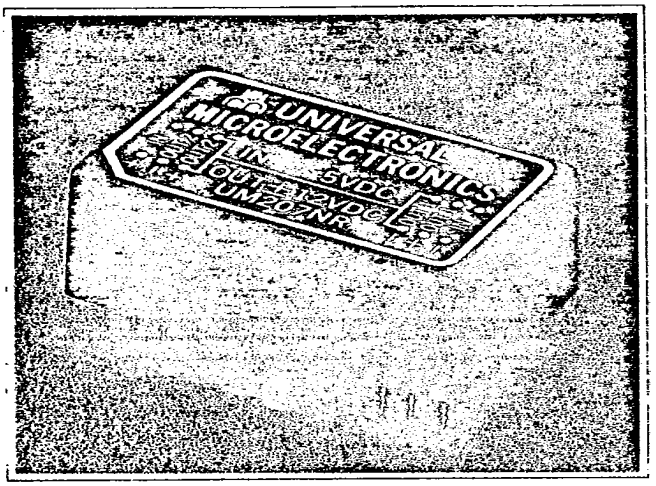
1 to 1.5 Watt DC-DC Converters

UM 200NR SERIES



- 24-Pin DIP Package
- 70% Efficiency
- Unregulated Outputs
- Pi Input Filter
- 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 Netwrok

OUTPUT SPECIFICATIONS

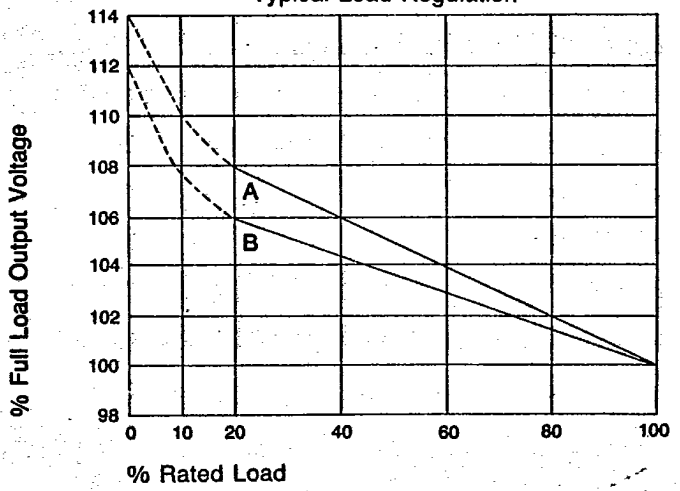
Voltage Accuracy	±3.0% max.
Ripple and Noise[1], 20MHz BW	100mV P-P max.
Short Circuit Protection	Short Term
Line Regulation[2]	±1.2%
Load Regulation[3], UM201NR	±8%
All Other Models	±6%

GENERAL SPECIFICATIONS

Efficiency	60-80%
Isolation Voltage	500 VDC min.
Isolation Capacitance	80pF
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	Non-Conductive Black Plastic

NOTE:
1. 15 μF 35V, Tantalum Capacitor Across Each Output.
2. Line regulation is per 1.0% change in input voltage.
3. Load regulation is for load change from 100% to 20%. See graph of load regulation.

Typical Load Regulation



Line A-UM201 NR
Line B-All Other Models

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8004-8415

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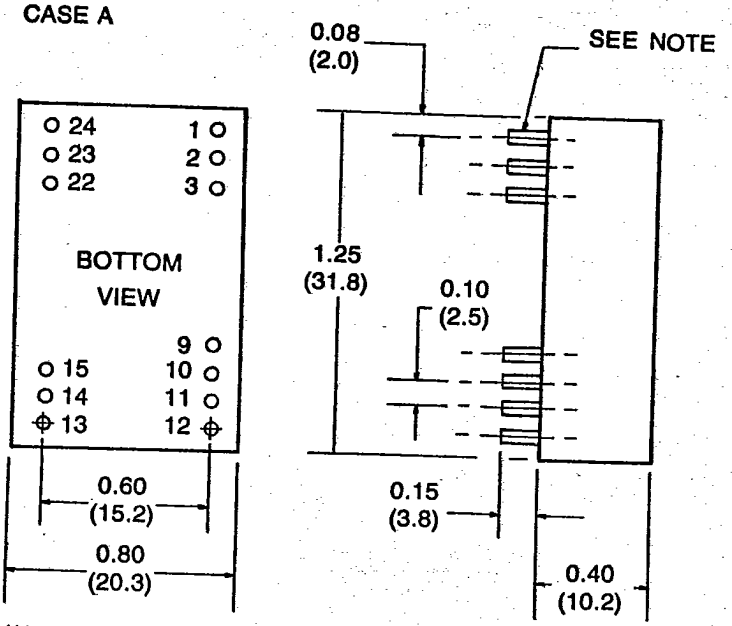
MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
				NO LOAD	FULL LOAD	
UM201NR	5 VDC	5 VDC	220 mA	115 mA	345 mA	A
UM203NR	5 VDC	12 VDC	125 mA	115 mA	450 mA	A
UM205NR	5 VDC	15 VDC	100 mA	115 mA	450 mA	A
UM207NR	5 VDC	±12 VDC	±62 mA	115 mA	450 mA	A
UM209NR	5 VDC	±15 VDC	±50 mA	115 mA	450 mA	A
UM211NR	12 VDC	5 VDC	220 mA	45 mA	125 mA	A
UM213NR	12 VDC	12 VDC	125 mA	45 mA	170 mA	A
UM215NR	12 VDC	15 VDC	100 mA	45 mA	170 mA	A
UM217NR	12 VDC	±12 VDC	±62 mA	45 mA	170 mA	A
UM219NR	12 VDC	±15 VDC	±50 mA	45 mA	170 mA	A

CASE A



ALL DIMENSIONS IN INCHES (MM)

NOTE: PIN SIZE IS .020 INCH (0.5mm) DIA. OR .020 × .014 INCH.

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