

UM200NR SERIES

1 to 1.5 Watt DC-DC Converters

- 24-Pin DIP Package
- 70% Efficiency
- Unregulated Outputs
- Pi Input Filter
- 500 VDC Isolation

SPECIFICATIONS

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

INPUT SPECIFICATIONS

Input Voltage Range $\pm 10\%$
Input Filter Pi Network

OUTPUT SPECIFICATIONS

Voltage Accuracy $\pm 3.0\%$ max.
Ripple and Noise¹, 20MHz BW 100mV P-P max.
Short Circuit Protection Short Time
Line Regulation² $\pm 1.2\%$
Load Regulation³, UM201NR $\pm 8\%$
All Other Models $\pm 6\%$

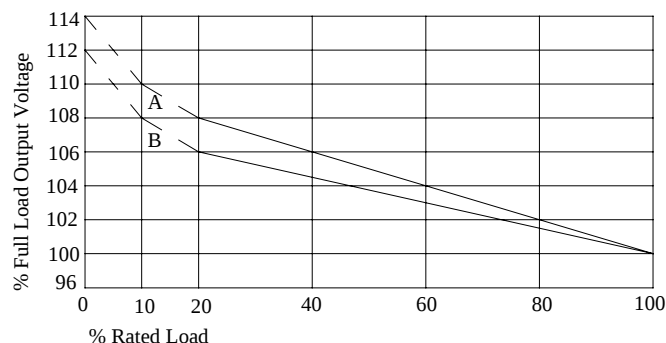
GENERAL SPECIFICATIONS

Efficiency 60-80%
Isolation Voltage 500 VDC min.
Isolation Capacitance 80pF
Isolation Resistance 10^8 ohms min.
Switching Frequency 20KHz min.
Operating Temperature Range,
Ambient, None Derating -25°C to +71°C
Cooling Free Air Convection
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
UL94V-0
Weight 15g

NOTES

1. 15 μ F 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-UM201NR

Line B-All other models

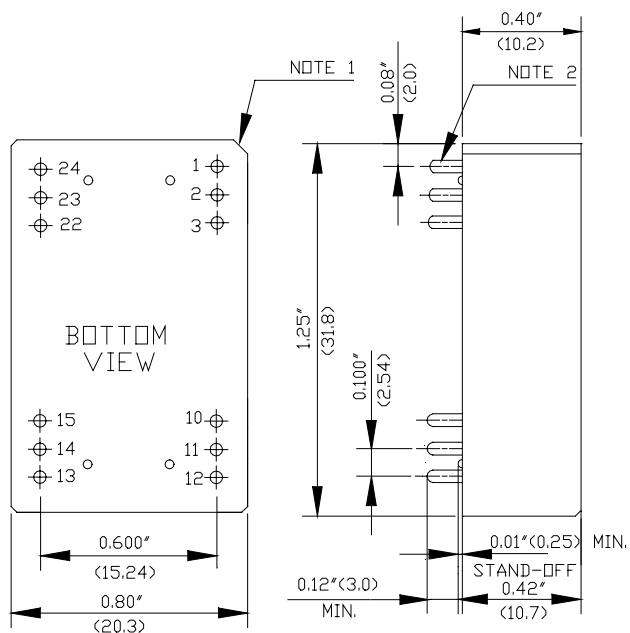


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MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
				NO LOAD	FULL LOAD	
UM201NR	5 VDC	5 VDC	220 mA	115 mA	345 mA	A
UM203NR		12 VDC	125 mA	115 mA	450 mA	
UM205NR		15 VDC	100 mA	115 mA	450 mA	
UM207NR		±12 VDC	± 62 mA	115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

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)on single output models.

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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