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 ……..……..± 10%
Input Filter ……..…….. Pi Network

OUTPUT SPECIFICATIONS

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

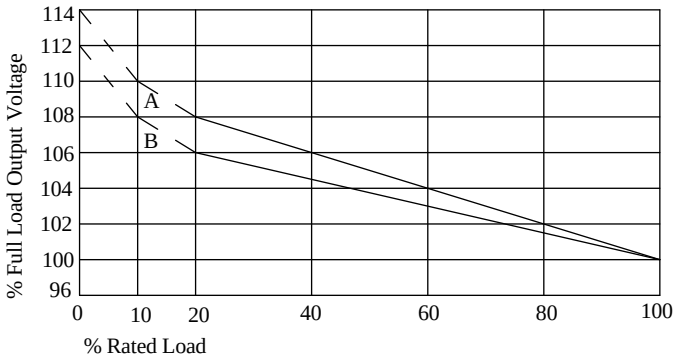
GENERAL SPECIFICATIONS

Efficiency …….. 60-80%
Isolation Voltage …….. 500 VDC min.
Isolation Capacitance …….. 80pF
Isolation Resistance …….. 10^8 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. 15uF 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.

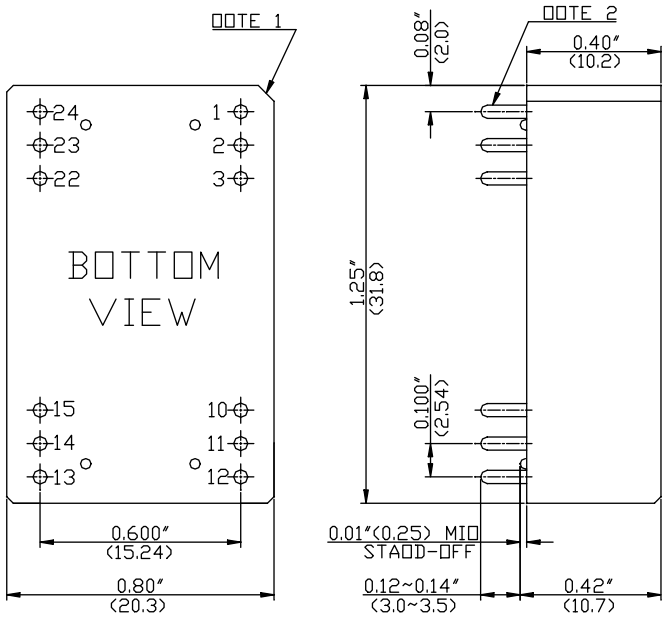
Typical Load Regulation



Line A-UM201 NR
Line B-All other models

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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