

UM200 SERIES

1.5 Watt DC-DC Converters

- 50% Efficiency
- Regulated Outputs
- Pi Input Filter
- 500 VDC Isolation Or 3K VDC (Suffix K3)
- Low Ripple and Noise

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

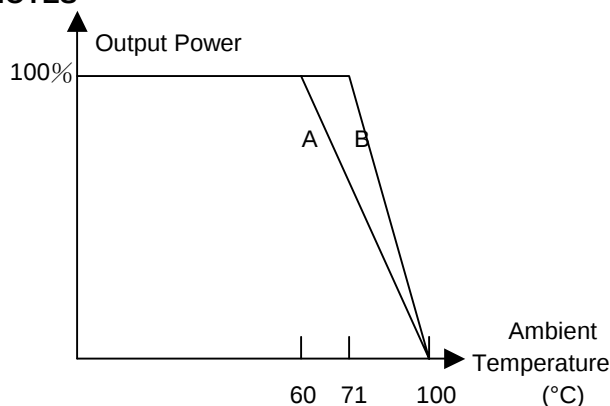
OUTPUT SPECIFICATIONS

Voltage Accuracy $\pm 4\%$ max.
Ripple and Noise, 20MHz BW 50mV P-P max.
Temperature Coefficient $\pm 0.02\%/^{\circ}\text{C}$
Short Circuit Protection Short Time
Line Regulation $\pm 0.3\%$
Load Regulation $\pm 0.5\%$

GENERAL SPECIFICATIONS

Efficiency 50%
Isolation Voltage 500 VDC min.
or 3000 VDC min. (K3)
Isolation Capacitance 30 pF or 10 pF (K3)
Isolation Resistance 10^8 Ohms min.
Switching Frequency 20 KHz min.
Operating Temperature Range
Ambient, None Derating -25°C to $+71^{\circ}\text{C}$
Cooling Free Air Convection
Storage Temperature Range -40°C to $+100^{\circ}\text{C}$
Dimensions CASE A 1.25*0.8*0.4 inches
(31.8*20.3*10.2mm)
Case Material
Standard Models Non-Conductive Black Plastic
UL94V-0
Suffix "M" Models Black-Coated Copper with
Non-Conductive Base
Weight 15g

NOTES



A: max. Vin.

B: nom Vin & min. Vin

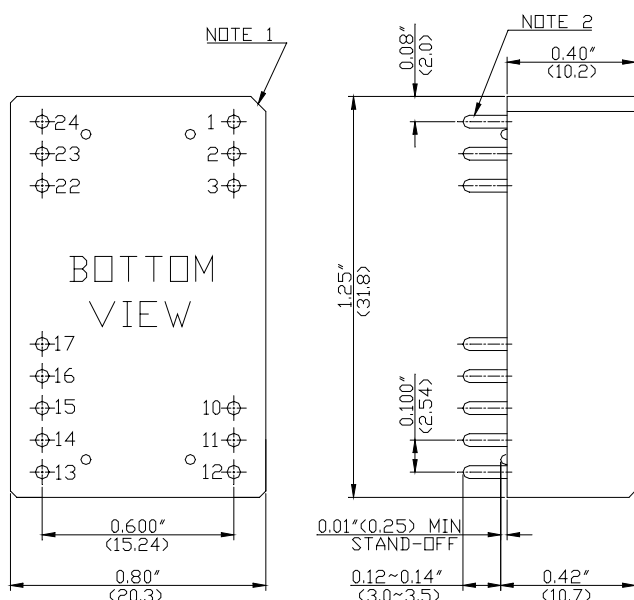


**UNIVERSAL
MICROELECTRONICS**

3,27TH RD., TAICHUNG INDUSTRIAL PARK,
TAICHUNG, TAIWAN, R.O.C.
TEL: 886-4-23590096 FAX: 886-4-23590129

MODEL NUMBER		INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		CASE
500VDC	3KVDC				NO LOAD	FULL LOAD	
UM201	UM201 K3	5VDC	5 VDC	300mA	110mA	650mA	A
UM203	UM203 K3		12 VDC	125mA	110mA	550mA	
UM205	UM205 K3		15 VDC	100mA	110mA	550mA	
UM207	UM207 K3		± 12 VDC	± 60mA	110mA	550mA	
UM209	UM209 K3		± 15 VDC	± 50mA	110mA	560mA	
UM211	UM211 K3	12VDC	5 VDC	300mA	40mA	270mA	A
UM213	UM213 K3		12 VDC	125mA	40mA	220mA	
UM215	UM215 K3		15 VDC	100mA	40mA	220mA	
UM217	UM217 K3		± 12 VDC	± 60mA	40mA	220mA	
UM219	UM219 K3		± 15 VDC	± 50mA	40mA	220mA	
UM221	UM221 K3	24VDC	5 VDC	300mA	20mA	135mA	A
UM223	UM223 K3		12 VDC	125mA	20mA	115mA	
UM225	UM225 K3		15 VDC	100mA	20mA	115mA	
UM227	UM227 K3		± 12 VDC	± 60mA	25mA	115mA	
UM229	UM229 K3		± 15 VDC	± 50mA	30mA	115mA	

CASE A



PIN CONNECTIONS (500V ISO.)			PIN CONNECTIONS (3KV ISO.)	
Pin	Single Output	Dual Output	Single Output	Dual Output
1	+V Input	+V Input	+V Input	+V Input
2	NC*	-V Output	+V Input	+V Input
3	NC*	Common	+V Input	+V Input
10	-V Output	Common	NP*	Common
11	+V Output	+V Output	NP*	Common
12	- V Input	- V Input	-V Output	-TP*
13	-V Input	-V Input	+V Output	-V Output
14	+V Output	+V Output	NP*	NP*
15	-V Output	Common	NP*	+V Output
16	NP*	NP*	NP*	+TP*
17	NP*	NP*	TP*	NP*
22	NC*	Common	-V Input	-V Input
23	NC*	-V Output	-V Input	-V Input
24	+V Input	+V Input	-V Input	-V Input

*NC(No Connection)

*NP(No Pin)

*TP(Test Point)

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



**UNIVERSAL
MICROELECTRONICS**

3,27TH RD., TAICHUNG INDUSTRIAL PARK,
TAICHUNG, TAIWAN, R.O.C.
TEL: 886-4-23590096 FAX: 886-4-23590129