

UM1600 SERIES

15 Watt DC-DC Converters

- ◆ Efficiency 80%
- ◆ Isolated Output
- ◆ Wide Range Inputs
- ◆ Low Profile
- ◆ Over Current Protection
- ◆ Power Density 10 Watts/in³
- ◆ Input/Output Protection

SPECIFICATIONS

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

INPUT SPECIFICATIONS

Input Voltage Range, 24V 18-36V
48V 36-72V
Input Filter Pi Network

OUTPUT SPECIFICATIONS

Voltage Accuracy
Single Output ±1.0% max.
Dual Output, + Output ±1.0% max.
Voltage Balance, Dual Output at Full Load ±2.0% max.
Load Regulation
Single Output, FL-1/4FL ±0.5% max.
Dual Output, FL-1/2FL ±1.0% max.
Single Output, FL-NL ±1.0% max.
Dual Output, FL-NL ±5.0% max.
Line Regulation, HL-LL ±0.2% max.
Ripple & Noise, 20MHz BW 15mV RMS max.
75mV P-P max.
Temperature Coefficient ±0.02%/°C max.
Voltage Stability, 24 Hours ±0.05% max.
Transient Response
Single, 25% Step Load Change 500µsec. max.
Dual, 50% Step Load Change 500µsec. max.
Short Circuit Protection Continuous

GENERAL SPECIFICATIONS

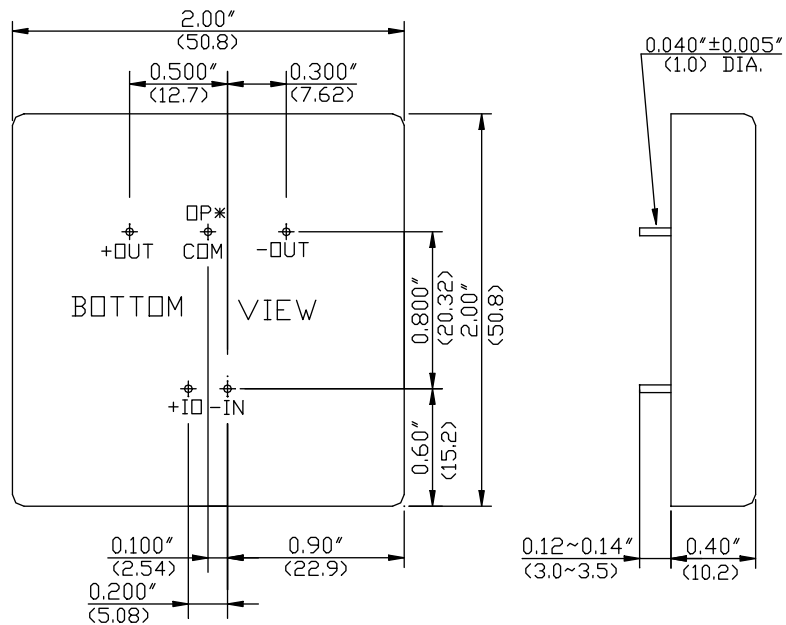
Efficiency See Table
Isolation Voltage 1500 VDC min.
Isolation Resistance 10⁸ Ohms min.
Switching Frequency 400KHz
Dimensions 2.0 x 2.0 x 0.4 inches
(50.8 x 50.8 x 10.2 mm)
Operating Temperature Range
Ambient, None Derating -25°C to +71°C
Cooling Material Free Air Convection
Storage Temperature Range -40°C to +105°C
Case Material Black Coated Copper with
Non-Conductive Base
Weight 60g

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF	CASE
				NO LOAD	FULL LOAD		
UM1601	24VDC	5 VDC	3000 mA	25 mA	800 mA	78	C
UM1602		12 VDC	1250 mA	25 mA	790 mA	79	
UM1603		15 VDC	1000 mA	25 mA	780 mA	80	
UM1604		± 12 VDC	± 625 mA	25 mA	790 mA	79	
UM1605		± 15 VDC	± 500 mA	25 mA	780 mA	80	
UM1611	48VDC	5 VDC	3000 mA	25 mA	400 mA	78	C
UM1612		12 VDC	1250 mA	25 mA	395 mA	79	
UM1613		15 VDC	1000 mA	25 mA	390 mA	80	
UM1614		± 12 VDC	± 625 mA	25 mA	380 mA	82	
UM1615		± 15 VDC	± 500 mA	25 mA	375 mA	83	

MODEL NUMBER	UM1601	UM1602	UM1603	UM1604	UM1605	UM1611	UM1612	UM1613	UM1614	UM1615
MAXIMUM ¹ CAPACITIVE LOAD	2200uF	680uF	330uF	+330uF -330uF	+270uF -270uF	2200uF	680uF	330uF	+330uF -330uF	+270uF -270uF

NOTE: 1. Maximum capacitive load across to each output ports should not be over following indicated values.

CASE C



NP*(NO PIN)On single output models
 All dimensions in inches(mm).
 Tolerance .xx =± 0.04
 .xxx =± 0.010