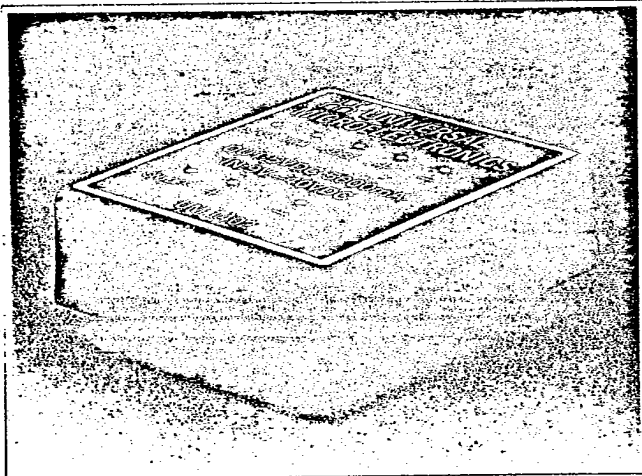


5 & 15 to 45 Watt DC-DC Converters

UM 1400 SERIES



- Ultra-Wide Input Range
- Power Density to 8 Watt/Cubic Inch
- Efficiency to 89%
- Six-Sided Shield
- Constant Switching Frequency 75 kHz
- OVP on All Models

SPECIFICATIONS

All Specifications Typical at Nominal Line, Full Load, and 25°C Unless Otherwise Noted.

INPUT SPECIFICATIONS

Input Voltage Range	See Table
Input Filter, C Case	Low ESR Cap.
EA Case	Low ESR Cap.
E Case	PI Network
Voltage Reversal	Not Protected

OUTPUT SPECIFICATIONS

Voltage Accuracy, E/EA Case	± 1.0% max.
C Case	± 2.0% max.
External Trim Range	± 10.0%
Temperature Coefficient, E/EA Case	± 0.02%/°C max.
C Case	± 0.1%/°C max.
Short Circuit Protection	
Output to Common	Continuous
Overvoltage Protection	All Models
Ripple/Noise, 20MHz BW	
E/EA Case	60mV P-P, 15mV RMS, max.
C Case	60mV P-P, 10mV RMS, max.
Line Regulation ¹	± 0.5% max.
Load Regulation ² , E/EA Case	± 0.5% max.
C Case	± 1% max.

GENERAL SPECIFICATIONS

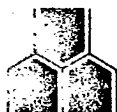
Efficiency	See Table
Isolation	not Galvanically Isolated
	Minus Input Connected Minus Output
Switching Frequency, E/EA Case	75 kHz
C Case	75 kHz
Input Idle Current During Shutdown	10mA
Operating Temperature Range	- 25°C to + 71°C
Storage Temperature Range	- 55°C to + 105°C
Dimensions	
E Case	2.56 × 3 × 0.83 inches (65 × 76.2 × 21.1mm)
EA Case	2.56 × 3 × 0.38 inches (65 × 76.2 × 9.5mm)
C Case	2 × 2 × 0.4 inches (50.8 × 50.8 × 10.2mm)
Case Material	Black Coated Copper with Non-Conductive Base

NOTE:

1. Measured from High Line to Low Line.
2. Measured from Full Load to low Load.

REMOTE ON/OFF CONTROL, E CASE Models

Logic Compatibility	CMOS or Open Collector TTL
E _c -ON, 5V Models	4.2 VDC or Open Circuit
12 & 15V Models	9.6 VDC or Open Circuit
E _c -OFF, 5V Models	3.5 VDC
12 & 15V Models	9.0 VDC
Control Input Resistance	100k ohms



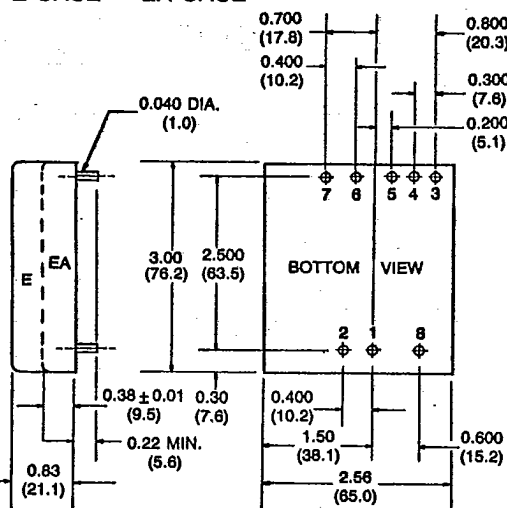
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MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT ¹		% EFF	CASE
				NO LOAD	FULL LOAD		
UM1401	7-40 VDC	5 VDC	3000 mA	20 mA	1570 mA	80	EA
UM1402	7-40 VDC	5 VDC	5000 mA	20 mA	2600 mA	80	E
UM1411	14-40 VDC	12 VDC	2000 mA	20 mA	1180 mA	85	EA
UM1412	14-40 VDC	12 VDC	3500 mA	20 mA	2010 mA	87	E
UM1421	17-40 VDC	15 VDC	1500 mA	20 mA	1080 mA	87	EA
UM1422	17-40 VDC	15 VDC	3000 mA	20 mA	2110 mA	89	E
UM1431	9-32 VDC	5 VDC	1000 mA	16 mA	555 mA	75	C

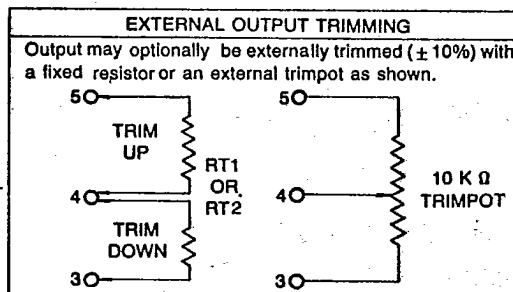
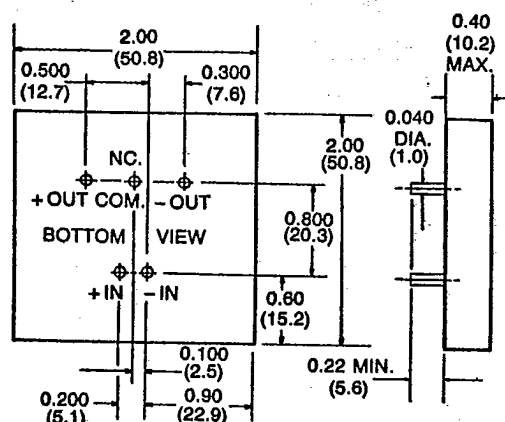
NOTE: 1. Nominal Input 12, 24 VDC

E CASE EA CASE



Pin Connections			
Pin	E Case	EA Case	C Case
1	+ Input	+ Input	+ Input
2	- Input	- Input	- Input
3	Output Sense +	Output Trim Down	+ Output
4	Output Trim	Output Trim	Output Trim
5	output Sense -	Output trim up	- Out put
6	+ Output	+ Output	No Pin
7	- Output	- Output	No Pin
8	Remote On/Off	No Pin	No Pin

CASE C



ALL DIMENSIONS IN INCHES (MM)
Standard Pin Configuration