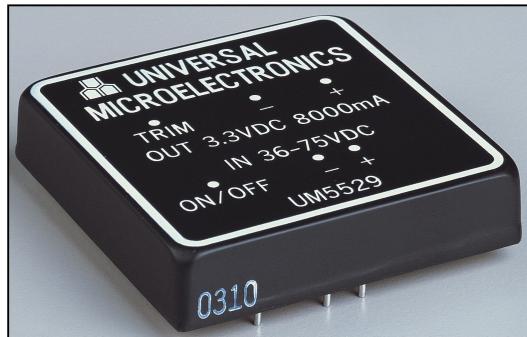


UM5500 SERIES

14.4 to 40 Watt DC/DC Converter



- ◆ 2:1 Input Range
- ◆ High Efficiency
- ◆ Remote On/Off Control
- ◆ Six-Sided Shield
- ◆ Short Circuit Protection
- ◆ Over Voltage Protection
- ◆ Safety Approvals Pending (EN60950 and UL/cUL)
- ◆ RoHS Compliant



SPECIFICATIONS

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

INPUT SPECIFICATIONS

Input Voltage Range,48V	.....	36-75VDC
Input Filter	.....	Pi Network
Input Overvoltage Shutdown	.....	80 VDC typ.
Input Undervoltage Shutdown	.....	31 VDC typ.

OUTPUT SPECIFICATIONS

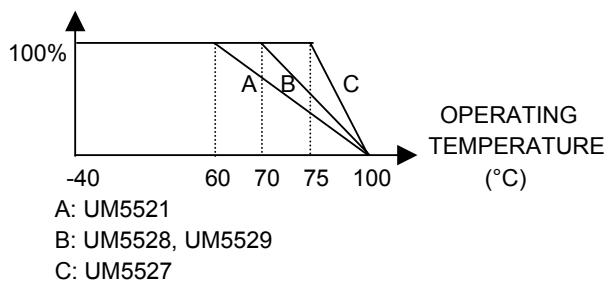
Voltage Accuracy	.....	±2% max.
External Trim Adj. Range	.....	+10%
Transient Response,		
25% Step Load Change(1% error band)	.....	<500 μS
Line Regulation ¹	.....	±0.5% max.
Load Regulation ²	.....	±0.5% max.
Ripple and Noise, 20MHz BW ³	.....	75 mV p-p max.
Temperature Coefficient	.....	±0.02%/°C max.
Short Circuit Protection	.....	Continuous Automatic Recovery
Overvoltage Protection Trip Point (Clamp Type)		
5V	.....	6.8V typ
3.3V	.....	4.3V typ
2.5V	.....	3.6V typ
1.8V	.....	2.4V typ

GENERAL SPECIFICATIONS

Efficiency	.....	See Table
Isolation Voltage, I/O	.....	1500 VDC
Isolation Resistance	.....	10 ⁸ ohms
Case Grounding	.....	Capacity Coupled to Input
Switch Frequency	.....	400 KHz typ.
Operating Temperature Range,	.....	-40°C to 100°C
Case Temperature	.....	105°C max.
Cooling	.....	Free Air Convection
Storage Temperature	.....	-40°C to +105°C
Dimensions	.....	2.0*2.0*0.4 inches (50.8*50.8*10.2 mm)
Case Material	.....	Black Coated Copper with Non-Conductive Base

NOTES

1. Measure from high line to low line.
2. Measure from full load to 1/10 load.
3. Measured with 1uF ceramic capacitor connect to the output pins.
4. Output Power



REMOTE ON/OFF CONTROL

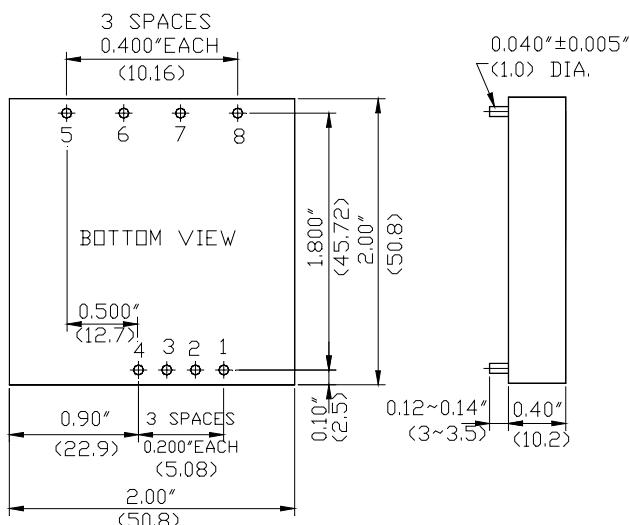
Logic Compatibility	.....	CMOS or Open Collector TTL
Converter ON	.....	>+2.5 VDC or Open Circuit
Converter OFF	<+0.8 VDC max or Short Circuit
Control Common	Referenced to Input Minus



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MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF (typ)	MAXIMUM CAPACITIVE LOAD (uF)	CASE
				NO LOAD	FULL LOAD			
UM5521	48 VDC	5 VDC	8000 mA	30 mA	946 mA	88	10000	C
UM5527	48 VDC	1.8 VDC	8000 mA	30 mA	361 mA	83	10000	C
UM5528	48 VDC	2.5 VDC	8000 mA	30 mA	490 mA	85	10000	C
UM5529	48 VDC	3.3 VDC	8000 mA	30 mA	550 mA	87	10000	C

NOTE: Other output voltage can be supported upon request.



All Dimensions in Inches (mm).

Tolerance .xx =±0.04"

.xxx =±0.010"

PIN CONNECTIONS	
Pin Number	Pin Function
1	Remote Control
2	No Pin
3	- Input
4	+ Input
5	No Pin
6	+ Output
7	- Output
8	Trim

EXTERNAL OUTPUT TRIMMING	
Output may optionally be externally trimmed with a fixed resistor or an external trimpot as shown.	
+Vout	



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UM5500

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

2 OF 2

REV. 1