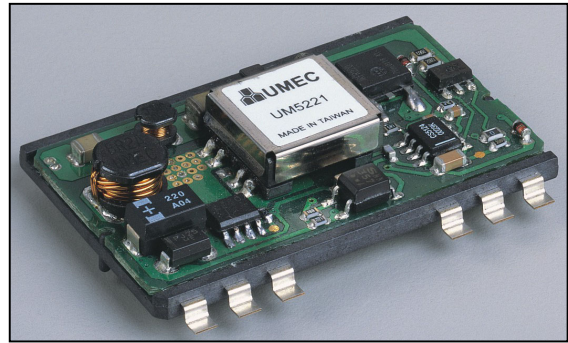


# UM5200 SERIES

## 15 Watts DC-DC Converters

- ◆ Surface Mount Isolated DC-DC Converter
- ◆ Low Profile, Open Frame Package
- ◆ Efficiency to 86%
- ◆ 2:1 Input Range
- ◆ 400KHz Switching Frequency
- ◆ Remote On/Off Control
- ◆ Compliant with Industry Standard Reflow Profiles



### SPECIFICATIONS

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

#### INPUT SPECIFICATIONS

Input Voltage Range, 48V ..... 36-75V  
 Input Filter ..... Pi Network

#### OUTPUT SPECIFICATIONS

Voltage Accuracy..... ±2% max.  
 Voltage Adjustability<sup>1</sup> ..... ±10%  
 Transient Response,  
 25% Step Load Change(1% error band) ..... <500 μS  
 Temperature Coefficient ..... ±0.02%/°C max.  
 Short Circuit Protection ..... Short Time  
 Over voltage Protection Trip Point (Zener Clamp Type)  
 1.8V,2.5V,3.3V ..... 4.3V  
 5V ..... 6.8V  
 Line Regulation<sup>2</sup> ..... ±0.5% max.  
 Load Regulation<sup>3</sup>  
 1.8V ..... ±2.0% max.  
 2.5V ..... ±1.5% max.  
 3.3V,5V ..... ±0.5% max.  
 Maximum Capacitive Load ..... 1000uF  
 Ripple and Noise, 20MHz BW<sup>4</sup>  
 .....100mVp-p, 30mVrms max.

#### GENERAL SPECIFICATIONS

Efficiency<sup>5</sup> ..... See Table  
 Isolation Voltage ..... 1500VDC min.  
 Isolation Resistance ..... 10<sup>8</sup> ohms min.  
 Switching Frequency ..... 400KHz typ.  
 Operating Ambient Temperature<sup>6</sup> ..... -40°C to +75°C  
 Cooling ..... Free Air Convection  
 Storage Temperature Range ..... -40°C to +105°C  
 Dimensions ..... 1.86\*1.15\*0.347 inches  
 (47.4\*29.2\*8.82mm)  
 Weight ..... 12g

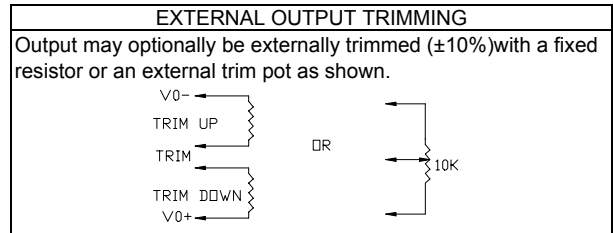


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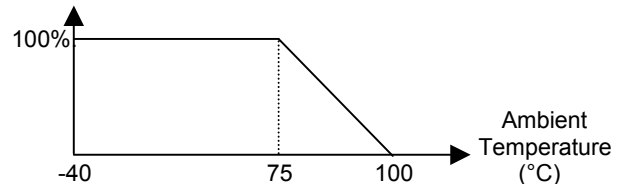
### NOTES

1.



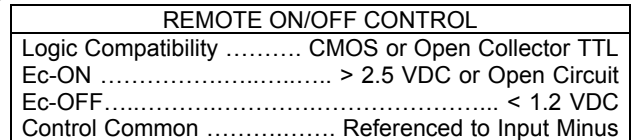
UM5221 trim adj. range: ±5% (36V≤Vin<48V),  
 ±10% (48V≤Vin≤75V).

2. Measured from high line to low line.
3. Measured from full load to 1/10 load.
4. Measured with 0.1uF ceramic capacitor connect to the output pins.
5. Measured at nominal line.
6. Output Power

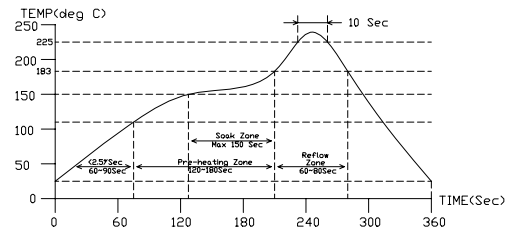


7. The converter required a minimum 10% loading on the output. Operation below 10% load conditions will not damage these devices. However they may not meet all listed spec.

8.



9. Recommended Reflow Soldering

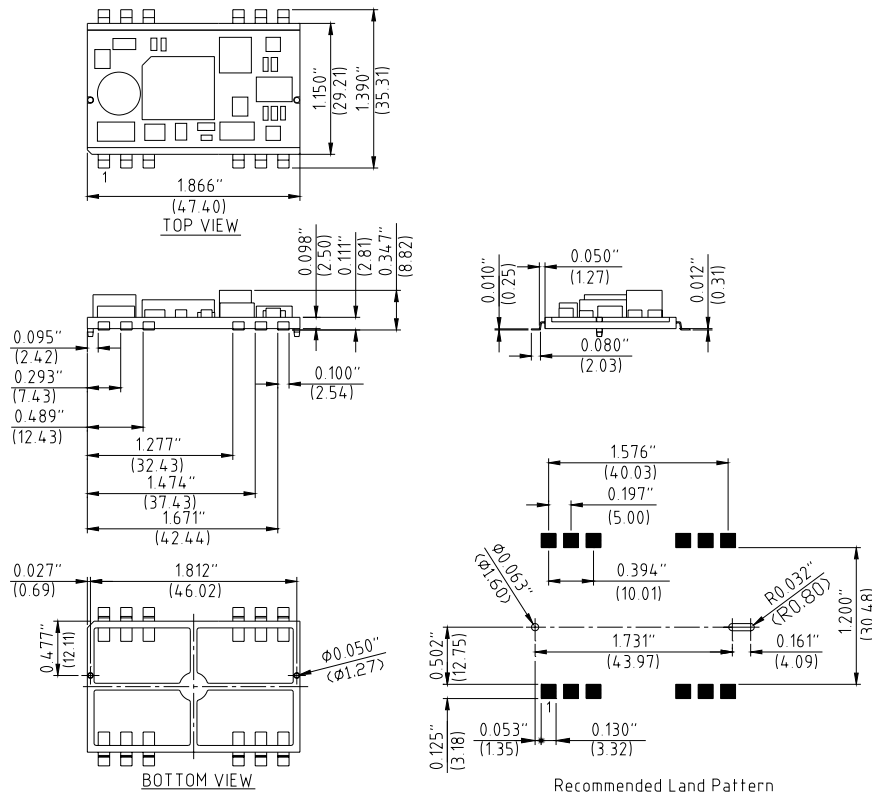


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 TORRANCE, CA 90505  
 TEL: (310) 326-7072 FAX: (310) 326-7058

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF (Typ.)
				NO LOAD	FULL LOAD	
UM5221	48 VDC	5 VDC	3000 mA	35 mA	359 mA	87
UM5227	48 VDC	1.8 VDC	6000 mA	40 mA	271mA	83
UM5228	48 VDC	2.5 VDC	5000 mA	38 mA	307 mA	85
UM5229	48 VDC	3.3 VDC	4500 mA	35 mA	360 mA	86

NOTE: Other output voltage can be supported upon request.

### Mechanical Drawing



Pin Connections	
Pin NO.	Function
1	+Vout
2	-Vout
3	NC
4	Trim
5	NC
6	NC
7	NC
8	On/Off
9	NC
10	NC
11	-Vin
12	+Vin

\*NC (No Connection)

All dimensions in inches (mm).

Tolerance .xx = ±0.04"

.xxx = ±0.010"



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