

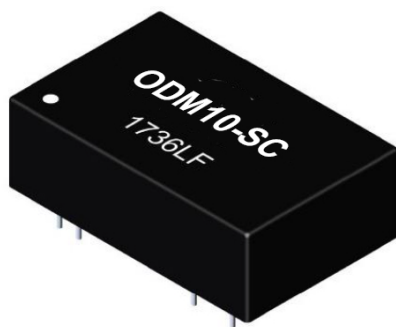


# ETA-USA

The Power Professionals

## ODM10-SC

## 10W DC/DC



### Features

- 4:1 Wide input range VDC
- Efficiency 85%~ 88%
- 5 KVAC Isolation
- Wide operating temperature from -40°C to +105°C
- EMI class A without external circuit
- No minimum load required
- Medical safety meets 2xMOPP per 3rd Edition of IEC/EN 60601-1
- Low leakage current; 5KVAC isolation
- DIP 24 package
- Available Inputs Voltage (nominal):
  - 24 VDC Nom (DC9~36V)
  - 48 VDC Nom (DC 1 ~75V)
- **2 Years Warranty**



| MODEL/CHANNEL |                       | Unit  | ODM10-05SC24 | ODM10-12SC24 | ODM10-15SC24 | ODM10-24SC24 |
|---------------|-----------------------|-------|--------------|--------------|--------------|--------------|
| OUTPUT        | Nominal Voltage       | V     | 5            | 12           | 15           | 24           |
|               | Current               | A     | 2.2          | .916         | .733         | .458         |
|               | Ripple & Noise(pk-pk) | mVp-p | 30           | 40           | 40           | 50           |
|               | Efficiency            | %     | 85.5         | 87.5         | 88           | 87.5         |
| MODEL/CHANNEL |                       | Unit  | ODM10-05SC48 | ODM10-12SC48 | ODM10-15SC48 | ODM10-24SC48 |
| OUTPUT        | Nominal Voltage       | V     | 5            | 12           | 15           | 24           |
|               | Current               | A     | 2.2          | .916         | .733         | .458         |
|               | Ripple & Noise(pk-pk) | mVp-p | 30           | 40           | 40           | 50           |
|               | Efficiency            | %     | 87           | 89           | 88           | 90           |
|               | Operating Frequency   | kHz   | 300          |              |              | 350          |
|               | Line Regulations      | mV    | .02          |              |              |              |
|               | Load Regulations      | mV    | .02          |              |              |              |
|               | Total Power           | W     | 11           |              |              |              |



# ETA-USA

16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>  
 Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753



# ETA-USA

The Power Professionals

## ODM10

## 10W DC/DC

| MODEL/CHANNEL      |                                    | Unit | ODM10-SC24                                                                                                                                                                                                                                                                                                                                                                                                              | ODM10-SC48   |
|--------------------|------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>INPUT</b>       | Voltage, Frequency                 | V    | (9~18)<br>6                                                                                                                                                                                                                                                                                                                                                                                                             | (18~36)<br>6 |
|                    | Start Up Time                      | mS   | Nom. Vin at 100% load Typ. 25ms                                                                                                                                                                                                                                                                                                                                                                                         |              |
|                    | Voltage Lockout 24VDC<br>48VDC     | VDC  | Typ. 7.5VDC<br>Typ. 15VDC                                                                                                                                                                                                                                                                                                                                                                                               |              |
|                    | Voltage Surge 24VDC<br>48VDC       | VDC  | Max. 50VDC<br>Max. 100VDC                                                                                                                                                                                                                                                                                                                                                                                               |              |
|                    | Start Up Time 24VDC<br>48VDC       | VDC  | 9 VDC<br>18 VDC                                                                                                                                                                                                                                                                                                                                                                                                         |              |
| <b>Function</b>    | Isolation Voltage                  | Vac  | 60 sec. 1mA Min. 5KVDC                                                                                                                                                                                                                                                                                                                                                                                                  |              |
|                    | Isolation Capacitance              | pf   | Max. 15 pF                                                                                                                                                                                                                                                                                                                                                                                                              |              |
|                    | Isolation Resistance               | -    | Min. 1000 MΩ                                                                                                                                                                                                                                                                                                                                                                                                            |              |
|                    | Overvoltage Protection             | -    | Min. 5.6~Max. 8<br>Min. 13.4~Max. 19.2<br>Min. 16.8~Max. 22.5<br>Min. 26.9~Max. 31.2                                                                                                                                                                                                                                                                                                                                    |              |
|                    | Overload Protection                | -    | Typ. 150%                                                                                                                                                                                                                                                                                                                                                                                                               |              |
| <b>Environment</b> | Cooling Method                     | -    | Convection                                                                                                                                                                                                                                                                                                                                                                                                              |              |
|                    | Operating temp. & Humidity         | -    | -40 ~ +105°C                                                                                                                                                                                                                                                                                                                                                                                                            |              |
|                    | Storage temp. & Humidity           | -    | -55 ~ +125°C                                                                                                                                                                                                                                                                                                                                                                                                            |              |
|                    | MTBF                               | -    | 25°C MIN. 1016 Khrs                                                                                                                                                                                                                                                                                                                                                                                                     |              |
|                    | Vibration 24VDC<br>48VDC           | -    | 10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis<br>Mil-STD 202G IEC68-2-6                                                                                                                                                                                                                                                                                                                           |              |
|                    | Safety/Emission                    | -    | 10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis<br>EMC EN55014 Class B, Radiated immunity EN61000-4-9 Criteria A;<br>ESD EN61000-4-2, Air±15kV, Contact±8kV / 30<br>Fast transient EN61000-4-4, ±2kV Criteria A;<br>Surge EN61000-4-5. ±2kV Criteria A; Conducted immunity EN61000-4-6<br>Magnetic field immunity EN61000-4-8 Criteria A<br>Medical safety 2 X MOPP per 3rd edition of IEC/EN 60601 |              |
| <b>Dimension</b>   | Size(LxWxH) 24VDC<br>/Weight 48VDC | mm/g | 25.4 25.4x10/17<br>50.8x25.4x12/30                                                                                                                                                                                                                                                                                                                                                                                      |              |
|                    | Case Material<br>Potting Material  | -    | PLASTIC MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                        |              |



# ETA-USA

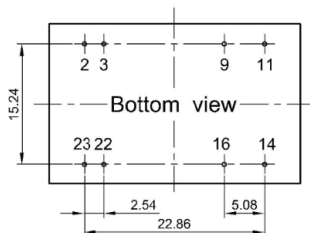
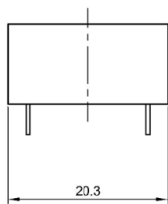
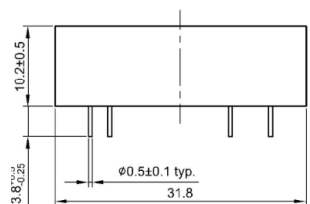
16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>  
Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753



## Derating Curve

## Filtering

## Design Diagram



Projection : Third angle projection  
Unit : mm  
Tolerance :  $\pm 0.25$  mm

| Pin    | Single |
|--------|--------|
| 2, 3   | -Vin   |
| 9      | No pin |
| 11     | No pin |
| 14     | +Vout  |
| 16     | -Vout  |
| 22, 23 | +Vin   |





# ETA-USA

*The Power Professionals*

## Ripple and Noise

## Packaging

ROHS



# ETA-USA

16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>  
Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ETA-USA:](#)

[ODM10-05SC24](#) [ODM10-05SC48](#) [ODM10-12SC24](#) [ODM10-12SC48](#) [ODM10-15SC24](#) [ODM10-15SC48](#) [ODM10-24SC24](#) [ODM10-24SC48](#)