



DOSA Standard Specification

Product Name: Isolated 1/16th brick DC/DC Converter

Last Updated: 9/27/04

General Specifications

Parameter	Specifications	Notes
Input Voltage Range	36-75V	
Output Voltages	1.0, 1.2, 1.5, 1.8, 2.5, 3.3, 5.0, 12V	
Max. Output Current	25A	Or 50W maximum power

Feature Descriptions

Feature	Description	Notes
On/Off control	Positive and negative logic	
Input Under Voltage Lockout	Auto recovery	
Output Current Protection	Auto recovery	
Over Temperature Protection	125°C (auto recovery)	
Output Over Voltage Protection	Auto recovery	
Remote sense	Included	
Trim Range	+10%, -10%	
Trim Down Equation (1.0V – 12V)	$R_{\text{trim-down}} = \left(\frac{511}{\Delta\%} \right) - 10.22 \text{ (k}\Omega\text{)}$ where $\Delta\% = \left(\frac{V_{\text{nominal}} - V_{\text{desired}}}{V_{\text{nominal}}} \right) \times 100\%$	
Trim Up Equation (1.0V and 1.2V only)	$R_{\text{trim-up}} = \left(\frac{5.11 V_{\text{OUT}}(100+\Delta\%)}{0.6 \Delta\%} - \frac{511}{\Delta\%} - 10.22 \right) \text{ (k}\Omega\text{)}$ where $V_{\text{OUT}} = \text{Nominal Output Voltage}$	
Trim Up Equation (1.5V - 12V)	$R_{\text{trim-up}} = \left(\frac{5.11 V_{\text{OUT}}(100+\Delta\%)}{1.225 \Delta\%} - \frac{511}{\Delta\%} - 10.22 \right) \text{ (k}\Omega\text{)}$ where $V_{\text{OUT}} = \text{Nominal Output Voltage}$	

Mechanical Specifications

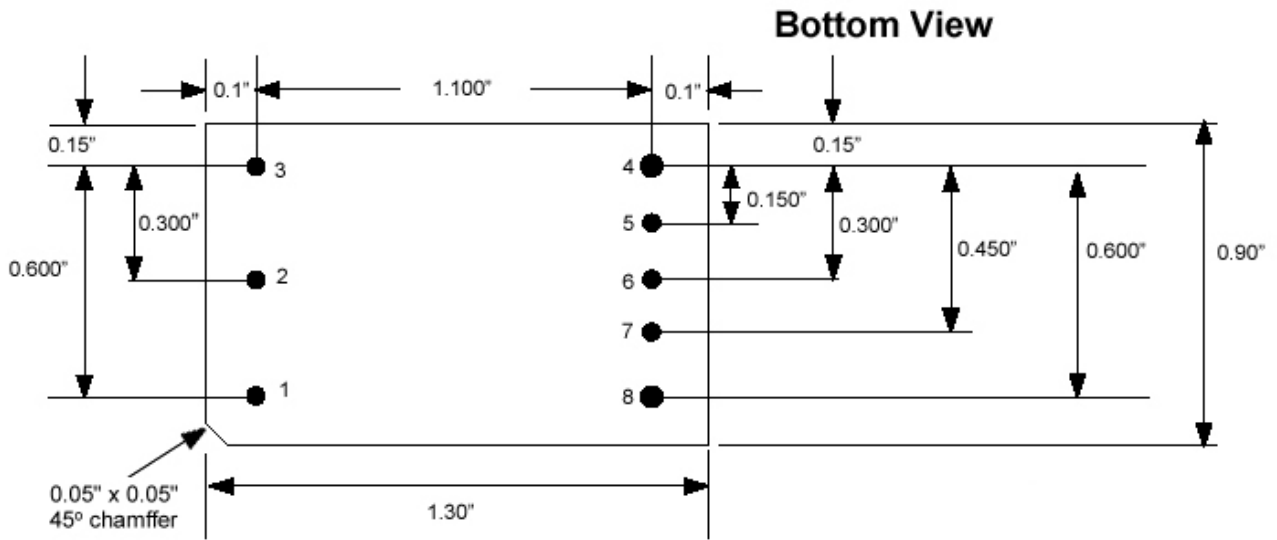
DOSA sixteenth-brick converters will be offered in both through hole and surface mount configurations.

Mechanical Outline for Sixteenth-Brick

Dimensions are in inches.

Tolerances: x.xx in. \pm 0.02 in.

x.xxx in \pm 0.010 in.



Pin Dimensions:

Through Hole: Pins 4 & 8 are 0.062" (1.57mm) diameter, pins 1-3, 5-7 are 0.040" (1.02mm) diameter.

Surface Mount: Pin diameter is 0.062" (1.57mm). Pad size is 0.082" (2.08mm).

Pin Designations:

Pin	Function
1	Vin (+)
2	On/Off
3	Vin (-)
4	Vout (-)
5	Sense (-)
6	Trim
7	Sense (+)
8	Vout (+)