

SELECTION GUIDE

Order code



Technical notes

ISOLATION VOLTAGE

"Hi Pot Test", "Flash Tested", "Withstand Voltage", "Dielectric Withstand Voltage" & "Isolation Test Voltage" are all terms that relate to the same thing, a test voltage. Applied for a specified time, across a component designed to provide electrical isolation, to verify the integrity of that isolation. Professional Power Module B_XLS series of DC/DC converters are all 100% production tested at their stated isolation voltage. This is 1KVDC for 1 second.

A question commonly asked is, "What is the continuous voltage that can be applied across the part in normal operation?"

For a part holding no specific agency approvals, such as the B_XLS series, both input and output should normally be maintained within SELV limits i.e. less than 42.4V peak, or 60VDC. The isolation test voltage represents a measure of immunity to transient voltages and the part should never be used as an element of a safety isolation system. The part could be expected to function correctly with several hundred volts offset applied continuously across the isolation barrier, but then the circuitry on both sides of the barrier must be regarded as operating at an unsafe voltage and further isolation/insulation systems must form a barrier between these circuits and any user-accessible circuitry according to safety standard requirements.

REPEATED HIGH-VOLTAGE ISOLATION TESTING

It is well known that repeated high-voltage isolation testing of a barrier component can actually degrade isolation capability, to a lesser or greater degree depending on materials, construction and environment. The B_XLS series has toroidal isolation transformers, with no additional insulation between primary and secondary windings of enameled wire. While parts can be expected to withstand several times the stated test voltage, the isolation capability does depend on the wire insulation. Any material, including this enamel T14(e)524/Lan4(l)-14(-)7yp)56(a)-14c56(e)

PACKAGE SPECIFICATIONS

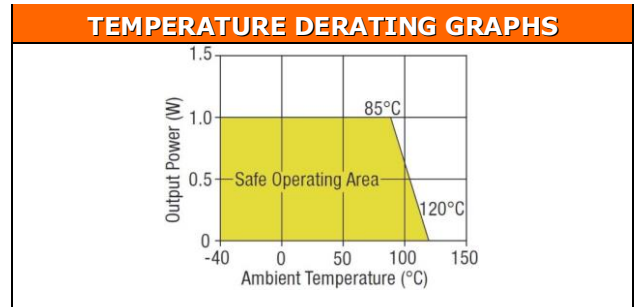
MECHANICAL DIMENSIONS

7 Pin SIP package	14 Pin DIP package

All dimensions in inches ± 0.01 (mm ± 0.25 mm).
 All pins on a 0.1(2.54) pitch and within ± 0.01 (0.25) of true position.

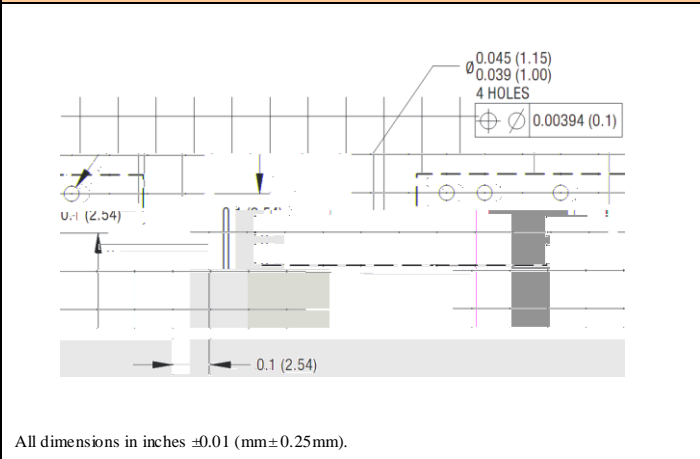
FOOTPRINT DETAILS

-7 PIN SIP		-14 PIN DIP	
Pin	Function	Pin	Function
1	+Vin	1	-Vin
2	-Vin	7	NC
4	-Vout	8	-Vout
6	+Vout	9	+Vout
		11	No Pin
		14	+Vin



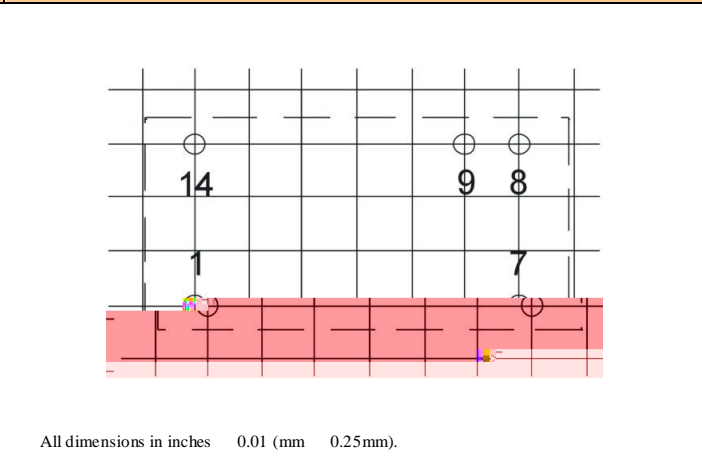
RECOMMENDED FOOTPRINT DETAILS

7 Pin SIP Package

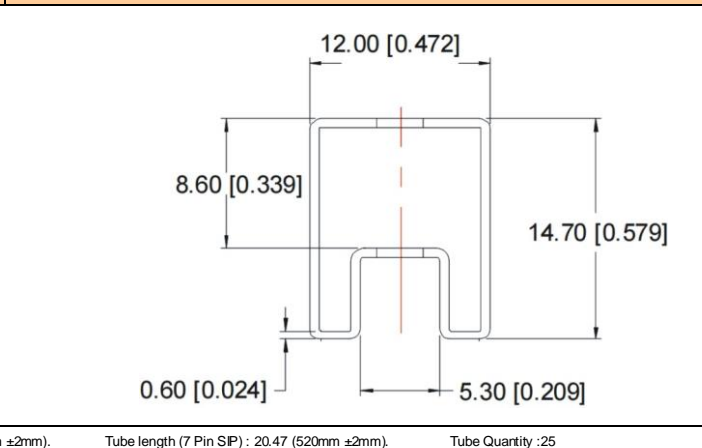
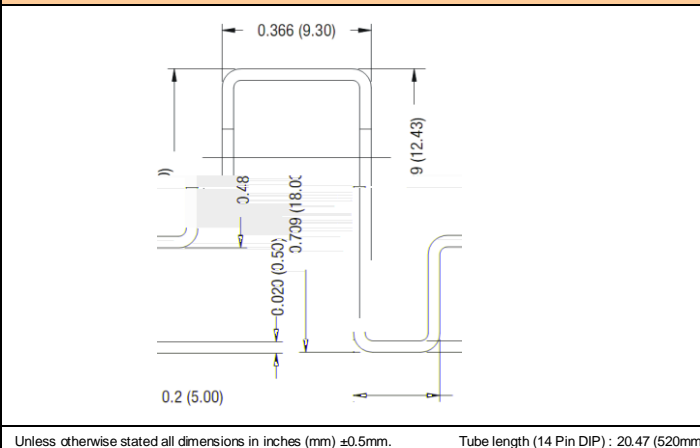


RECOMMENDED FOOTPRINT DETAILS

14 Pin SIP Package



TUBE OUTLINE DIMENSIONS



Unless otherwise stated all dimensions in inches (mm) ± 0.5 mm. Tube length (14 Pin DIP) : 20.47 (520mm ± 2 mm). Tube length (7 Pin SIP) : 20.47 (520mm ± 2 mm). Tube Quantity :25