

1 Watt**8 Pin DIL Package L**

- o Ultra-Miniature Size
- o Unregulated Output
- o 1000 VDC Isolation
3000 VDC Isolation add Suffix „H3“
- o Only Single Output

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT (FULL LOAD)	INPUT CURRENT		%EFF
				NO-LOAD	FULL LOAD	
1LUS5N3.3M	5 VDC	3.3 VDC	303 mA	25 mA	278 mA	72
1LUS5N5M		5 VDC	200 mA		267 mA	75
1LUS5N7.2M		7.2 VDC	138.8 mA		264 mA	76
1LUS5N9M		9 VDC	111.1 mA		260 mA	77
1LUS5N12M		12 VDC	83.3 mA		257 mA	78
1LUS5N15M		15 VDC	66.67 mA			
1LUS5N18M		18 VDC	55.5 VDC			
1LUS5N24M		24 VDC	41.67 mA			
1LUS12N3.3M	12 VDC	3.3 VDC	303 mA	16 mA	116 mA	72
1LUS12N5M		5 VDC	200 mA		112 mA	75
1LUS12N7.2M		7.2 VDC	138.8 mA		110 mA	76
1LUS12N9M		9 VDC	111.1 mA		109 mA	77
1LUS12N12M		12 VDC	83.3 mA		107 mA	78
1LUS12N15M		15 VDC	66.67 mA			
1LUS12N18M		18 VDC	55.5 mA			
1LUS12N24M		24 VDC	41.67 mA			
1LUS24N3.3M	24 VDC	3.3 VDC	303 mA	10 mA	58 mA	72
1LUS24N5M		5 VDC	200 mA		56 mA	75
1LUS24N7.2M		7.2 VDC	138.8 mA		55 mA	76
1LUS24N9M		9 VDC	111.1 mA			77
1LUS24N12M		12 VDC	83.3 mA		54 mA	78
1LUS24N15M		15 VDC	66.67 mA			
1LUS24N18M		18 VDC	55.5 mA			
1LUS24N24M		24 VDC	41.67 mA			

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS

Input Voltage Range	±10 %
Input Filter	Capacitor Type
Input Reflected Ripple Current ¹⁾	20 mA p-p

OUTPUT SPECIFICATIONS

Voltage Accuracy	±3%
Temperature Coefficient	±0.02%/°C
Capacitive Load ²⁾	220 µF
Ripple and Noise ³⁾ , 20MHz BW	100 mV p-p
Line Regulation	±1.2%/1% of Vin Change
Load Regulation	20% to 100% 3.3 V Models
	±10% ±20%

NOTE:

1. Measured Input reflected ripple current with a simulated source inductance of 12 µH.
2. Tested by minimal Vin and constant resistive load.
3. Ripple/Noise is measured with 20 MHz bandwidth.

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

GENERAL SPECIFICATION

Efficiency	see table
Isolation Voltage (3 sec) add Suffix "H3"	Input/Output 1000 VDC 3000 VDC
Isolation Resistance	1000 Mohms
Isolation Capacitance	60 pF
Switching Frequency	variable 80 kHz
Operating Temperature Range	-40°C to +85°C (see Derating Curve)
Case Temperature	+100°C max.
Storage Temperature Range	-40°C to +125°C
Humidity	95% rel H
Reliability Calculated MTBF (MIL-HDBK-217F)	>1.121 Mhrs
Safety Standard (designed to meet)	IEC60950-1
Radiated Emissions	EN55022 Class B FCC 47 CFR Part 15 Subpart B Class B
ESD (Electrostatic Discharge)	IEC61000-4-2 Perf. Criteria B
RS (Radiated, Radio-Frequency, Electromagnetic Field)	IEC61000-4-3 Perf. Criteria A
Cooling	Natural Convection
Case Material	Non-Conductive Black Plastic (UL94V-0 rated)
Pin Material	Ø0.5 mm Brass Solder-coated
Potting Material	Epoxy (UL94V-0 rated)
Weight	1.8 g
Dimensions	12.70 x 10.16 x 6.85 mm (0.5 x 0.4 x 0.27 Inches)

ABSOLUTE SPECIFICATIONS

These are stress ratings. Exposure of devices to any of these conditions may adversely affect long-term reliability.

Input Voltage (100 mS)	5 V	0 VDC to 7 VDC
	12 V	0 VDC to 15 VDC
	24 V	0 VDC to 28 VDC
Models Lead Soldering Temperature (1.5 mm from case 10 sec.)		+260°C

NOTE:

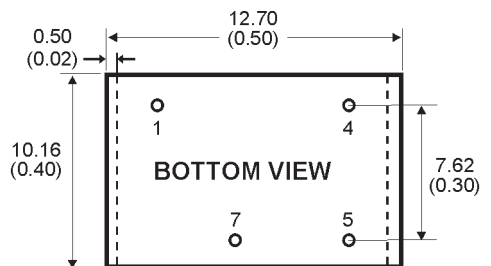
Exceeding the absolute ratings of the unit could cause damage. It is not allowed for continuous operating.
 Operation under no-load conditions will not damage these devices, however they may not meet all listed specifications.

SPECIFICATIONS

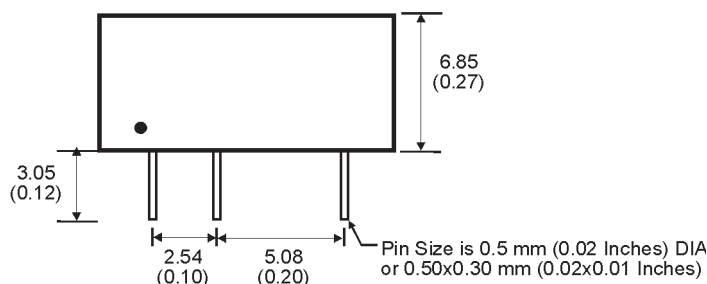
All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

MECHANICAL SPECIFICATIONS

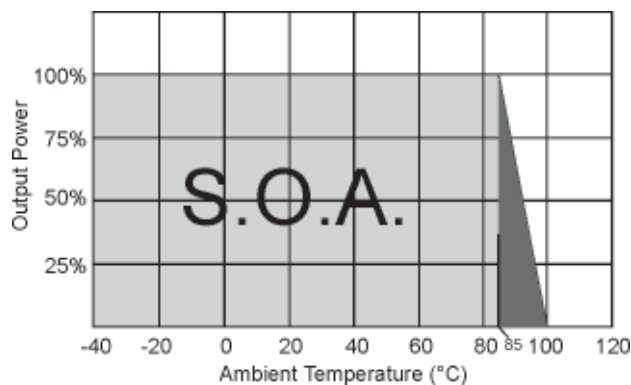
CASE "L"



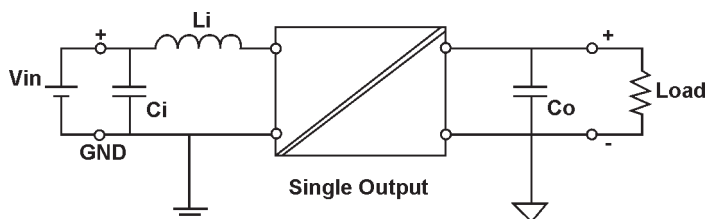
PIN CONNECTIONS	
1	-INPUT
4	+INPUT
5	+OUTPUT
7	-OUTPUT



All Dimensions in mm (Inches).

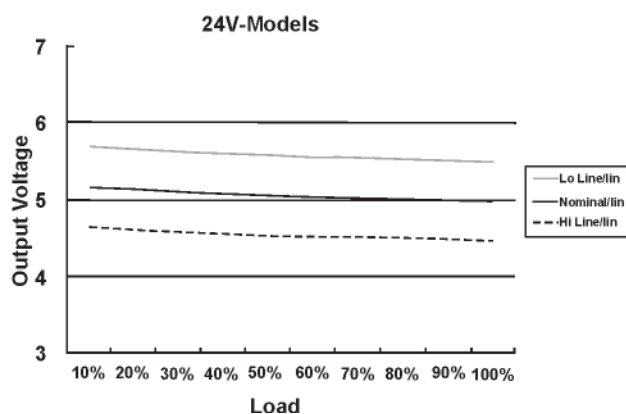
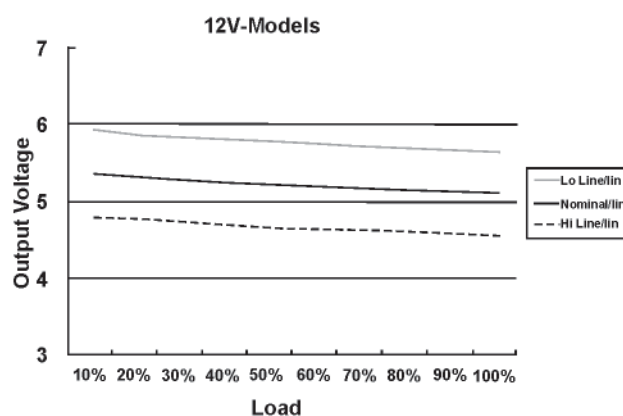
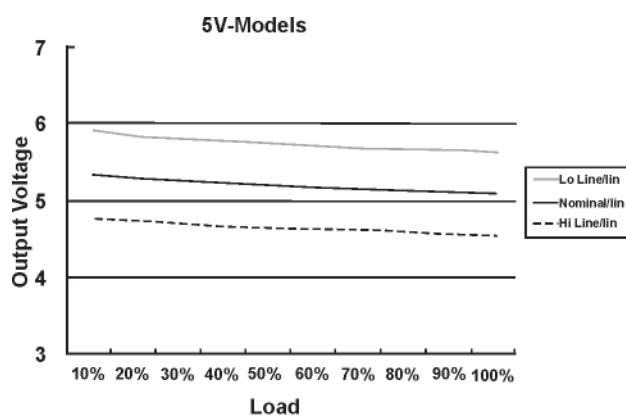
Tolerances: Pin Diameter: 0.5 ± 0.05 (0.02 ± 0.002)Pin Pitch: ± 0.35 (± 0.014)Case: ± 0.5 (± 0.02)**DIAGRAMS & APPLICATION NOTES****Derating Curve**

For reduce coverter's ripple & noise, it is recommended to add a 4.7 μ F to 100 μ F capacitor in output end. For EMI performance improvement, it is recommended to add a 12 μ H inductor and a 10 μ F to 220 μ F capacitor in input end.



SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

Loading vs Output Voltage**NOTICE:**

The information in this document has been carefully checked. However, no responsibility is assumed for inaccuracies! Specifications can be changed without notice. The latest and most complete information can be found on our website.