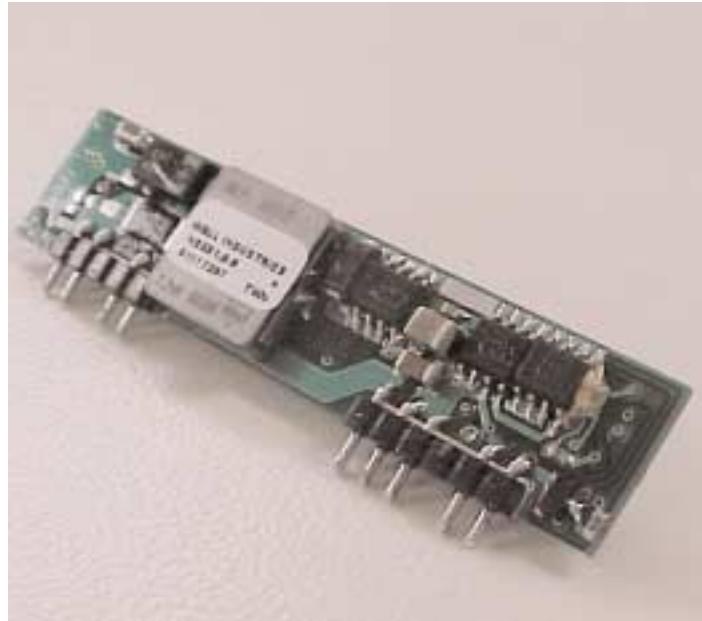


**PRODUCT FEATURES**

- Compact Single-in-Line Package (SIP)
- Industry Standard Footprint
- High Efficiency
- Adjustable Output Voltage
- Remote On/Off
- Ten Year Warranty
- Thermal Shutdown/Auto Recovery

**THE NS SERIES FROM WALL INDUSTRIES**

The NS Series offers the designer cost effective conversion from 5V to 3.3V and lower, in a convenient footprint. This allows greater flexibility without redesign of existing architecture.

**SPECIFICATIONS: NS SERIES****Input Specifications**

Input Voltage Range.....	4.5-5.5VDC
Nominal Input.....	5VDC
Input Voltage Lockout.....	$V_{in} < 3.5VDC$
Input Filter.....	100mf, ESR <.045 Ohms
Input Reflected Ripple.....	.200 mA Typ.
Remote On/Off.....	Ref. to Ground

**Output Specifications**

Set Point Accuracy.....	$V_{in}=5.0V$ ; $I_o=6A$ ; $TA=25^{\circ}C$ , $\pm 1\%$ of $V_{out}$
Output Current.....	See Table
Line Regulation(LL-HL).....	$\pm 0.5\%$
Load Regulation.....	$\pm 0.5\%$
Ripple .....	.100mVp-p, 20mHZ B.W.
Trim.....	$\pm 10\%$

**General Specifications**

Efficiency.....	86% @ 3.3V typical
Isolation Voltage.....	Non Isolated
Isolation Resistance.....	N/A
Switching Frequency.....	.500kHz Typical
Minimum Load.....	.3.3 No Min. Load 2.5, 1.5 Consult Factory

**Environmental Specifications**

Operating Temperature.....	-40° to +70°C
Storage Temperature.....	-40°C to +125°C
Temperature Coefficient.....	.02% per °C
Transient Response.....	$\pm 2\%$ with 300m sec. Recovery

**Physical Specifications**

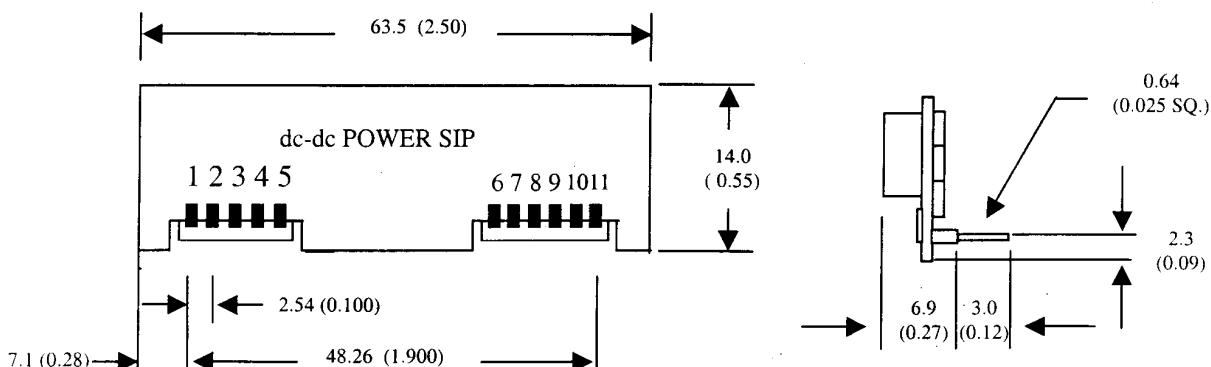
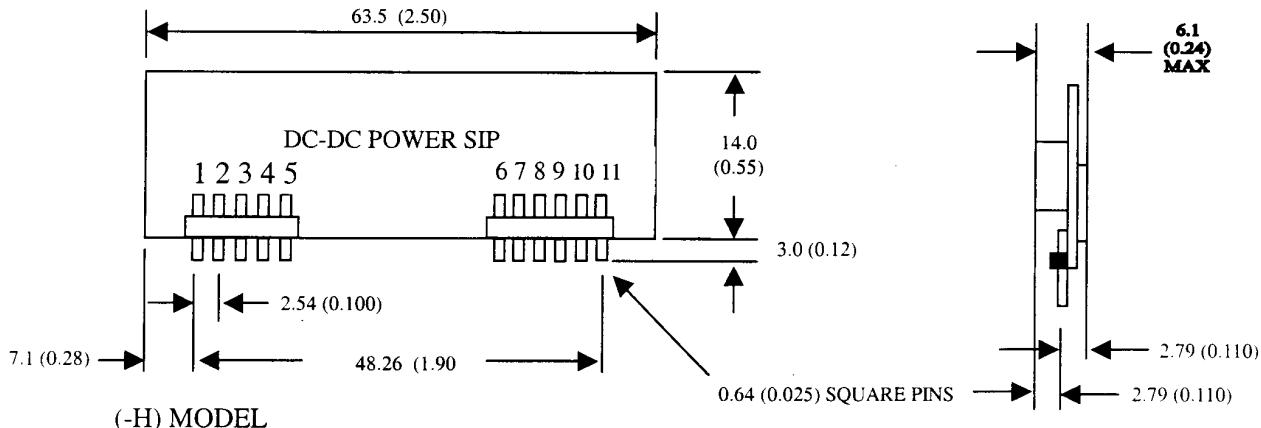
Package size.....	2.50" X 0.55" X 0.24"
Weight.....	0.25 oz.
Case Material.....	Open Frame

All specifications apply at  $+25^{\circ}C$  ambient unless otherwise noted. Due to advances in technology, specifications subject to change without notice.

**20 WATTS****NS SERIES**

<b>Input Voltage</b>	<b>Output Voltage</b>	<b>Current Amps</b>	<b>Output Current Wattage</b>	<b>Model Number</b>
4.5-5.5	3.3	6	19.8	NS5S3.3-20
	2.5	6	15	NS5S2.5-15
	2.1	6	12.6	NS5S2.1-12
	1.8	6	10.8	NS5S1.8-11
	1.5	6	7.5	NS5S1.5-9

NOTE: add suffix "RS" for optional remote sense

**J1 PIN CONNECTIONS**

<b>1</b>	+V <sub>out</sub>
<b>2</b>	+V <sub>out</sub>
<b>3</b>	Opt. Remote Sense (+)
<b>4</b>	+V <sub>out</sub>
<b>5</b>	Ground

**J2 PIN CONNECTIONS**

<b>1</b>	Ground
<b>2</b>	+V <sub>in</sub>
<b>3</b>	+V <sub>in</sub>
<b>4</b>	No Pin
<b>5</b>	Trim
<b>6</b>	Remote ON/OFF

Option without Capacitors  
on Back Side

## Notes:

1. Auto off power train protection.
2. Measured with a 0.1uF across output.
3. Application notes on Thermal Management and External Trim available, consult factory.
4. All dimensions are for reference only unless otherwise noted.