

2 Watts

IH Series



- Dual Output
- SIP or DIP Package
- Industry Standard Pinout
- 1000 VDC Isolation
- Optional 3000-6000 VDC Isolation
- Short Circuit Protection
- -40 °C to +85 °C Operation

Specification

Input

Input Voltage Range	• Nominal $\pm 10\%$
Input Current (no load)	• See table
Input Reflected Ripple	• 20 mA rms
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• None ⁽⁶⁾
Line Regulation	• 1.2%/1% ΔV_{in}
Load Regulation	• $\pm 10\%$ 20-100% load change (3.3 V models $\pm 20\%$)
Setpoint Accuracy	• $\pm 5\%$
Ripple & Noise	• 60 mV pk-pk
Temperature Coefficient	• 0.02%/°C
Short Circuit Protection	• 1 s max
Maximum Capacitive Load	• 470 μ F

General

Efficiency	• See table
Isolation Voltage	• 1000VDC (for higher isolation options - see note 2)
Isolation Capacitance	• 60 pF typical
Switching Frequency	• Variable
MTBF	• >1 Mhrs

Environmental

Operating Temperature	• -40 °C to +85 °C
Storage Temperature	• -40 °C to +125 °C
Case Temperature	• 100 °C max
Cooling	• Convection-cooled

Notes

1. For DIP package, replace 'S' with 'D' in model number.
2. Add suffix '-H' to model number for 3000 VDC isolation. For higher VDC isolation, add suffix '-Hx' to model number where x=4 for 4000 VDC isolation, x=5 for 5200 VDC isolation and x=6 for 6000 VDC isolation.
3. Outputs will power-trade.
4. 0.31" (9.65 mm) for all '-Hx' versions.
5. All dimensions in inches (mm).
6. Operation at no load will not damage unit but it may not meet all specifications.

Input Voltage	No Load Input Current	Output Voltage	Output Current ⁽⁶⁾	Efficiency	Model Number ^(1,2)
5 VDC	30 mA	± 3.3 V	± 200 mA	65%	IH0503S
	30 mA	± 5.0 V	± 200 mA	72%	IH0505S†
	30 mA	± 9.0 V	± 111 mA	77%	IH0509S†
	30 mA	± 12.0 V	± 84 mA	78%	IH0512S†
	30 mA	± 15.0 V	± 66 mA	80%	IH0515S†
12 VDC	30 mA	± 24.0 V	± 42 mA	80%	IH0524S
	20 mA	± 3.3 V	± 200 mA	67%	IH1203S
	20 mA	± 5.0 V	± 200 mA	75%	IH1205S†
	20 mA	± 9.0 V	± 111 mA	77%	IH1209S†
	20 mA	± 12.0 V	± 84 mA	82%	IH1212S†
24 VDC	20 mA	± 15.0 V	± 66 mA	82%	IH1215S†
	20 mA	± 24.0 V	± 42 mA	82%	IH1224S
	10 mA	± 3.3 V	± 200 mA	68%	IH2403S
	10 mA	± 5.0 V	± 200 mA	75%	IH2405S†
	10 mA	± 9.0 V	± 111 mA	80%	IH2409S†
48 VDC	10 mA	± 12.0 V	± 84 mA	82%	IH2412S†
	10 mA	± 15.0 V	± 66 mA	82%	IH2415S†
	10 mA	± 24.0 V	± 42 mA	82%	IH2424S
	6 mA	± 3.3 V	± 200 mA	60%	IH4803S
	6 mA	± 5.0 V	± 200 mA	73%	IH4805S
48 VDC	6 mA	± 9.0 V	± 111 mA	77%	IH4809S
	6 mA	± 12.0 V	± 84 mA	80%	IH4812S
	6 mA	± 15.0 V	± 66 mA	80%	IH4815S
	6 mA	± 24.0 V	± 42 mA	80%	IH4824S

† Available from Farnell, see pages 204-206.

Mechanical Details

