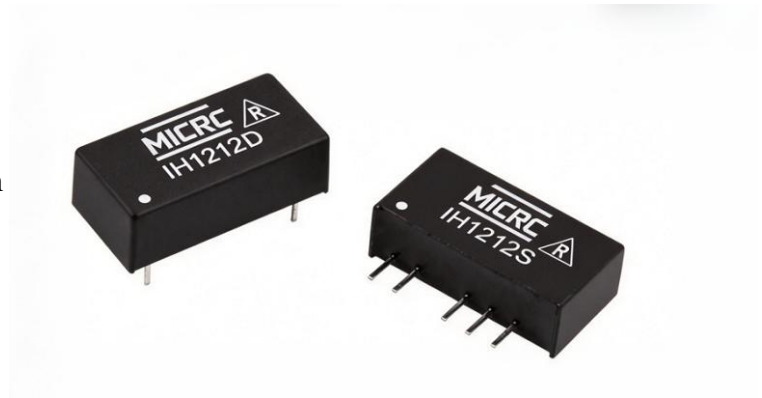


IH Series · 2 Watts

Features

- Dual Output
- SIP or DIP Package
- 1000 VDC Isolation
- Optional 3000–6000 VDC Isolation
- MTBF > 1.1 Mhrs
- -40 °C to +85 °C Operation
- 3 Year Warranty



Specification

Input

Input Voltage Range: Nominal $\pm 10\%$

Input Reflected Ripple Current: 20 mA pk-pk through 12 μ H inductor, 5 Hz to 20 MHz

Input Reverse Voltage Protection: None

Input Filter: Capacitor

Output

Output Voltage: See table

Minimum Load: None(3)

Line Regulation: 1.2%/1% ΔV_{in}

Load Regulation: $\pm 10\%$ 20-100% load change (3.3 V models $\pm 20\%$)

Setpoint Accuracy: $\pm 3\%$

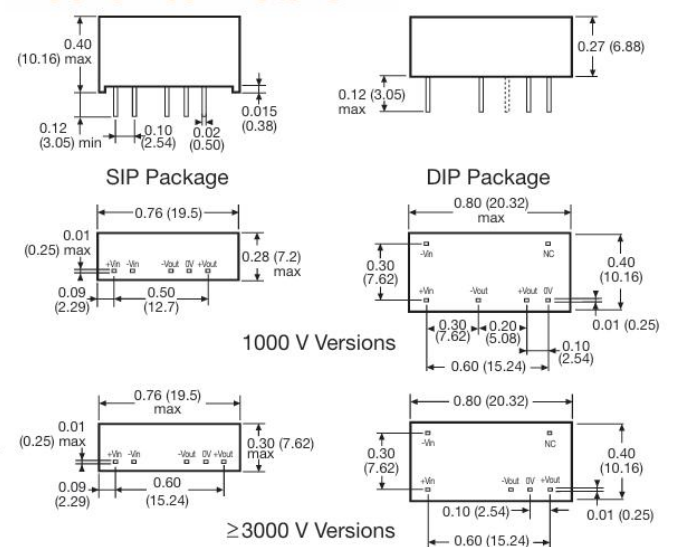
Ripple & Noise: 75 mV pk-pk max, 20 MHz bandwidth

Temperature Coefficient: 0.02%/°C

Maximum Capacitive Load: $\pm 220 \mu$ F

Cross Regulation: 3.3 V and 5 V: $\pm 8\%$, all others: $\pm 5\%$ (4)

Mechanical Details



General

Efficiency: See table

Isolation Voltage: 1000 VDC(2)

Isolation Resistance: $10^9 \Omega$

Isolation Capacitance: 60 pF typical

MTBF: > 1.1 MHrs to MIL-HDBK-217F
at 25 °C, GB

Environmental

Operating Temperature: -40 °C to +85 °C

Storage Temperature: -40 °C to +125 °C

Case Temperature: 100 °C max

Cooling: Convection-cooled

Selection Table

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

Mechanical Details

SIP Package (1000 V Versions)

- Overall length 0.76 (19.5) max; width 0.50 (12.7); height 0.09 (2.29)
- 28 (7.2) max; pin spacing 0.01 (0.25) max

SIP Package (3000 V Versions)

- Overall length 0.76 (19.5) max; height 0.30 (7.62) max
- 0.09 (2.29); 0.01 (0.25) max; 0.40 (10.16)
- 0.01 (0.25); 0.60 (15.24); 0.10 (2.54); 0.30 (7.62); 0.80 (20.32)

DIP Package (1000 V Versions)

- Overall length 0.80 (20.32) max; width 0.40 (10.16)
- 0.60 (15.24); 0.30 (7.62); 0.20 (5.08); 0.10 (2.54); 0.30 (7.62); 0.01 (0.25)

DIP Package (3000 V Versions)

- 0.40 (10.16) max; 0.12 (3.05) min; 0.10 (2.54); 0.02 (0.50); 0.015 (0.38)
- 0.27 (6.88); 0.12 (3.05) max

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. Operation at no load will not damage unit but it may not meet all specifications.
4. When one output is set to 100% load and the other varies between 25%-100% load.
5. All dimensions in inches (mm).
6. Pin pitch tolerance: ± 0.014 (± 0.35)
7. Case tolerance: ± 0.02 (± 0.5)
8. Weight: SIP 0.004 lbs (2.2 g), DIP 0.005 lbs (2.4 g)