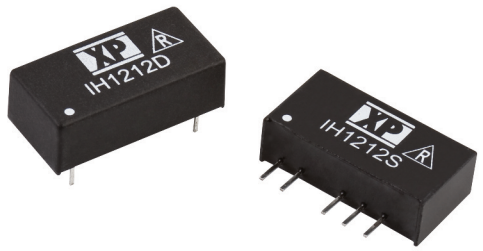
2 Watts
IH Series



- 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 ±10%
Input Reflected Ripple Current	• 20 mA pk-pk through 12 µH inductor, 5Hz 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% Δ Vin
Load Regulation	• ±10% 20-100% load change (3.3 V models ±20%)
Setpoint Accuracy	• ±3%
Ripple & Noise	• 75 mV pk-pk max, 20 MHz bandwidth
Temperature Coefficient	• 0.02%/°C
Maximum Capacitive Load	• ±220 µF
Cross Regulation	• 3.3 V and 5 V: ±8%, all others: ±5%[4]

General

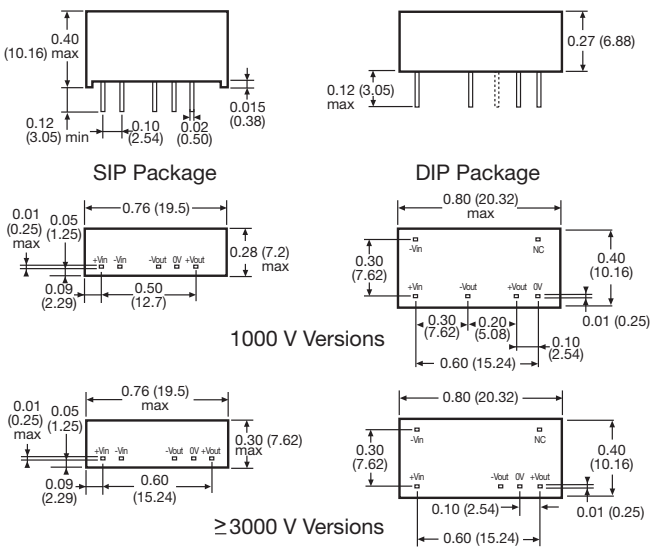
Efficiency	• See table
Isolation Voltage	• 1000 VDC[2]
Isolation Resistance	• 10^9 Ω
Isolation Capacitance	• 60 pF typical
MTBF	• >1.1 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

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

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
	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
	30 mA	±24.0 V	±42 mA	80%	IH0524S
12 VDC	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
	20 mA	±15.0 V	±66 mA	82%	IH1215S
	20 mA	±24.0 V	±42 mA	82%	IH1224S
24 VDC	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
	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
48 VDC	6 mA	±3.3 V	±200 mA	60%	IH4803S
	6 mA	±5.0 V	±200 mA	73%	IH4805S
	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

Mechanical Details



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)