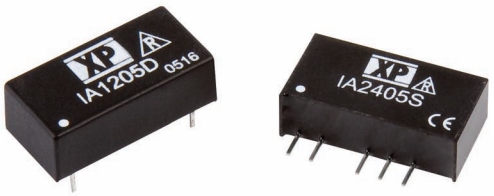
1 Watt
IA Series



- Dual Output
- SIP or DIP Package
- Industry Standard Pinout
- 1000 VDC Isolation
- –40 °C to +85 °C Operation
- MTBF >1.1 MHrs
- 3 Year Warranty

Specification

Input

Input Voltage Range	• Nominal ±10%[5]
Input Reflected Ripple Current	• 20 mA pk-pk (through 12 µH inductor 5 Hz to 20 MHz)
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• None[6]
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	• ±100 µF

General

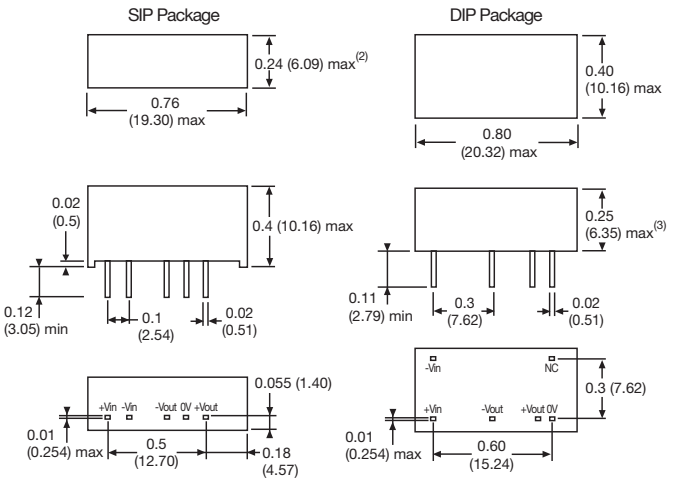
Efficiency	• See table
Isolation Voltage	• 1000 VDC minimum
Isolation Resistance	• $10^9\Omega$
Isolation Capacitance	• 60 pF typical
Switching Frequency	• Variable, 80 KHz typical
MTBF	• >1.12 MHrs to MIL-HDBK-217F at 25 °C, GB

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	Output Voltage	Output Current[4]	Efficiency	Model Number[1]
3.3 VDC	±5.0 V	±100 mA	66%	IA0305S
5 VDC	±3.3 V	±151 mA	65%	IA0503S
	±5.0 V	±100 mA	74%	IA0505S
	±9.0 V	±55 mA	78%	IA0509S
	±12.0 V	±42 mA	78%	IA0512S
	±15.0 V	±33 mA	80%	IA0515S
	±24.0 V	±21 mA	80%	IA0524S
12 VDC	±3.3 V	±151 mA	66%	IA1203S
	±5.0 V	±100 mA	75%	IA1205S
	±9.0 V	±55 mA	76%	IA1209S
	±12.0 V	±42 mA	78%	IA1212S
	±15.0 V	±33 mA	80%	IA1215S
	±24.0 V	±21 mA	76%	IA1224S
24 VDC	±3.3 V	±151 mA	68%	IA2403S
	±5.0 V	±100 mA	74%	IA2405S
	±9.0 V	±55 mA	76%	IA2409S
	±12.0 V	±42 mA	78%	IA2412S
	±15.0 V	±33 mA	78%	IA2415S
	±24.0 V	±21 mA	78%	IA2424S
48 VDC[5]	±3.3 V	±151 mA	60%	IA4803S
	±5.0 V	±100 mA	70%	IA4805S
	±9.0 V	±55 mA	72%	IA4809S
	±12.0 V	±42 mA	74%	IA4812S
	±15.0 V	±33 mA	74%	IA4815S
	±24.0 V	±21 mA	70%	IA4824S

Mechanical Details



Notes

1. Replace 'S' in model number with 'D' for DIP package.
2. SIP 48 Vin models, dimension is 0.28 (7.20) max.
3. DIP 48 Vin models, dimension is 0.27 (6.88) max.
4. Outputs power-trade.
5. For 48 V models a 10 µF capacitor is required between +Vin and -Vin pins.
6. Operation at no load will not damage unit but it may not meet all specifications.
7. All dimensions in inches (mm).
8. Pin pitch tolerance: ±0.014 (±0.35)
9. Case tolerance ±0.02 (±0.5)
10. Weight: SIP 0.006 lbs (2.6 g), DIP 0.005 lbs (2.3 g)