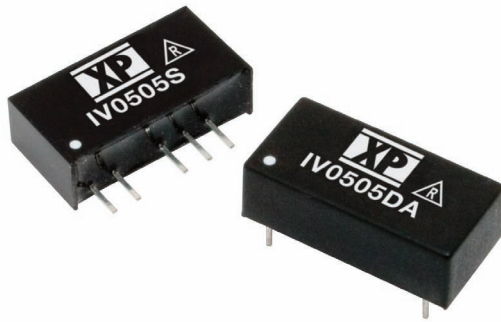


# 1 Watt IV Series



- Single & Dual Output
- SIP or DIP Package
- 3000 VDC Isolation
- Optional 4000 & 6000 VDC Isolation
- -40 °C to +85 °C Operation
- MTBF >1.1 Mhrs
- 3 Year Warranty

## Specification

### Input

- Input Voltage Range** • Nominal  $\pm 10\%$ <sup>(3)</sup>
- Input Reflected** • 20 mA pk-pk through 12  $\mu$ H, 5 Hz to 20 MHz
- Ripple Current**
- Input Reverse Voltage Protection** • None
- Input Filter** • Capacitor

### Output

- Output Voltage** • See table
- Minimum Load** • None<sup>(4)</sup>
- Line Regulation** • 1.2%/1%  $\Delta$  Vin
- 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** • Dual:  $\pm 100 \mu$ F, Single: 220  $\mu$ F

### General

- Efficiency** • See table
- Isolation Voltage** • 3000 VDC<sup>(6)</sup>
- Isolation Resistance** • 10<sup>9</sup> $\Omega$
- Isolation Capacitance** • 60 pF typical
- Switching Frequency** • Variable, 80 KHz 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

### Notes

1. For dual output, delete suffix 'A', and split current equally between rails.
2. For DIP package, replace 'S' in part number with 'D'.
3. For 48 V nominal input, a 4.7-47  $\mu$ F capacitor is required across the input.
4. Operation at no load will not damage unit but it may not meet all specifications.
5. 48 V model dimension is 0.28 (7.20).
6. For 4000 VDC Isolation, add suffix '-H4'. For 6000 VDC Isolation, add suffix '-H6'.
7. All dimensions in inches (mm).
8. Pin pitch tolerance:  $\pm 0.014$  ( $\pm 0.35$ )
9. Case tolerance:  $\pm 0.02$  ( $\pm 0.5$ )
10. Weight: SIP 0.006 lbs (2.6 g), DIP 0.005 lbs (2.3 g)

Input Voltage <sup>(9)</sup>	No Load Input Current	Output Voltage	Output Current	Efficiency	Model Number <sup>(1,2)</sup>
5 VDC	30 mA	3.3 V	300 mA	75%	IV0503SA
	30 mA	5.0 V	200 mA	78%	IV0505SA
	30 mA	9.0 V	112 mA	75%	IV0509SA
	30 mA	12.0 V	84 mA	76%	IV0512SA
	30 mA	15.0 V	66 mA	76%	IV0515SA
	30 mA	24.0 V	42 mA	72%	IV0524SA
12 VDC	20 mA	3.3 V	300 mA	74%	IV1203SA
	20 mA	5.0 V	200 mA	74%	IV1205SA
	20 mA	9.0 V	112 mA	75%	IV1209SA
	20 mA	12.0 V	84 mA	77%	IV1212SA
	20 mA	15.0 V	66 mA	78%	IV1215SA
	20 mA	24.0 V	42 mA	75%	IV1224SA
24 VDC	10 mA	3.3 V	300 mA	75%	IV2403SA
	10 mA	5.0 V	200 mA	77%	IV2405SA
	10 mA	9.0 V	112 mA	75%	IV2409SA
	10 mA	12.0 V	84 mA	78%	IV2412SA
	10 mA	15.0 V	66 mA	78%	IV2415SA
	10 mA	24.0 V	42 mA	78%	IV2424SA
48 VDC	6 mA	3.3 V	300 mA	72%	IV4803SA
	6 mA	5.0 V	200 mA	72%	IV4805SA
	6 mA	9.0 V	112 mA	74%	IV4809SA
	6 mA	12.0 V	84 mA	75%	IV4812SA
	6 mA	15.0 V	66 mA	75%	IV4815SA
	6 mA	24.0 V	42 mA	70%	IV4824SA

## Mechanical Details

