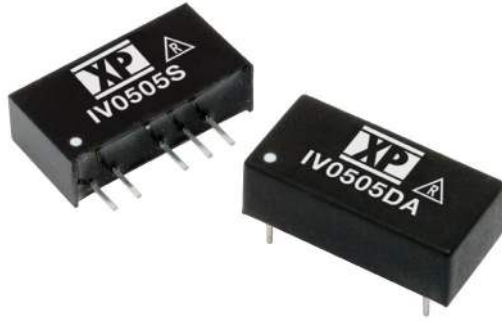


1 Watt IV Series



- Single & Dual Unregulated Output
- SIP or DIP Package
- 3.0kV DC Isolation
- Optional 4.0kV & 6.0kV DC Isolation
- -40°C to +85°C Operation
- MTBF >1.1 Mhrs
- 3 Year Warranty

Specification

Input

- Input Voltage Range • Nominal $\pm 10\%$
- Input Reflected • 20mA pk-pk through 12 μ H
- Ripple Current • 5Hz to 20MHz
- 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 • $\pm 10\%$ 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 μ F

General

- Efficiency • See table
- Isolation Voltage • 3000 VDC⁽⁴⁾
- Isolation Resistance • 10⁹ Ω
- 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

Safety

- Safety Approvals • UL60950-1 & CAN/CSA C22.2 No. 60950-1
UL62368-1 & CAN/CSA C22.2 No. 62368-1, CE & UKCA meets all applicable directives & legislation.

Notes

- For dual output, delete suffix 'A', and split current equally between rails.
- For DIP package, replace 'S' in part number with 'D'.
- Operation at no load will not damage unit but it may not meet all specifications.
- For 4000 VDC Isolation, add suffix '-H4'. For 6000 VDC Isolation, add suffix '-H6'.
- All dimensions in inches (mm).
- Pin pitch tolerance: ± 0.014 (± 0.35)
- Case tolerance: ± 0.02 (± 0.5)
- Weight: SIP 0.006 lbs (2.6 g), DIP 0.005 lbs (2.3 g)

Input Voltage ⁽⁵⁾	No Load Input Current	Output Voltage	Output Current	Efficiency	Model Number ^(1,2)
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

Mechanical Details

