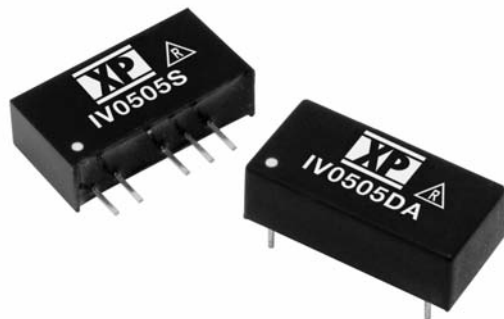


1 Watts

IV Series



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

Specification

Input

Input Voltage Range	• Nominal $\pm 10\%$ ⁽³⁾
Input Reflected Ripple Current	• 20 mA pk-pk (5 Hz to 20 MHz with 12 μ H)
Input Reverse Voltage Protection	• None
Input Filter	• Capacitor

Output

Output Voltage	• See table
Minimum Load	• None ⁽⁴⁾
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 (Optional 4000 or 6000 VDC)
Isolation Resistance	• $10^9 \Omega$
Isolation Capacitance	• 60pF 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 μ 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 4000VDC Isolation, add suffix 'H4'. For 6000VDC Isolation, add suffix 'H6'.
7. All dimensions in inches (mm).
8. Pin pitch tolerance: ± 0.014 (± 0.35)
9. Case tolerance: ± 0.02 (± 0.5)
10. Weight: SIP 0.004 lbs (2.2 g), 48 V SIP 0.006 lbs (2.7 g), DIP 0.005 lbs (2.4 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%	IV2405SA ^{†^}
	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%	IV4805SA
	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

[†] Available from Farnell. See pages 266-269.

[^] Available from Newark. See pages 270-272.

Mechanical Details

