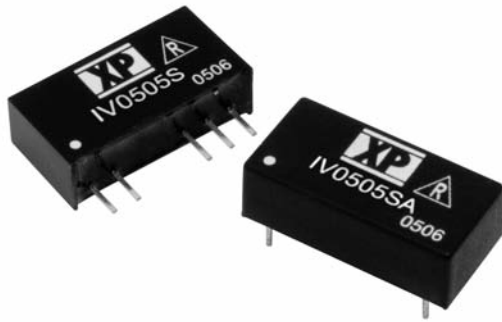


## IV Series



- Single & Dual Output
- Industry Standard Pinout
- SIP or DIP Package
- 3000 VDC Isolation (Optional 6000 VDC)
- Short Circuit Protection
- -40 °C to +85 °C Operation
- MTBF >1.2 Mhrs

### Specification

#### Input

- Input Voltage Range • Nominal  $\pm 10\%$
- Input Current (no load) • See table
- Input Reflected Ripple • 20 mA pk-pk
- Input Reverse Voltage Protection • None

#### Output

- Output Voltage • See table
- Minimum Load • None<sup>(5)</sup>
- Line Regulation • 1.2%/1%  $\Delta V_{in}$
- Load Regulation •  $\pm 10\%$  20-100% load change (3.3 V models  $\pm 20\%$ )
- Setpoint Accuracy •  $\pm 3\%$
- Ripple & Noise • 75 mV pk-pk, 20 MHz BW
- Temperature Coefficient • 0.02%/°C
- Short Circuit Protection • 1 s max
- Maximum Capacitive Load • 100  $\mu$ F

#### General

- Efficiency • See table
- Isolation Voltage • 3000 VDC minimum
- Isolation Resistance •  $10^9 \Omega$
- Isolation Capacitance • 60pF typical
- Switching Frequency • Variable
- MTBF • >1.2 Mhrs

#### Environmental

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

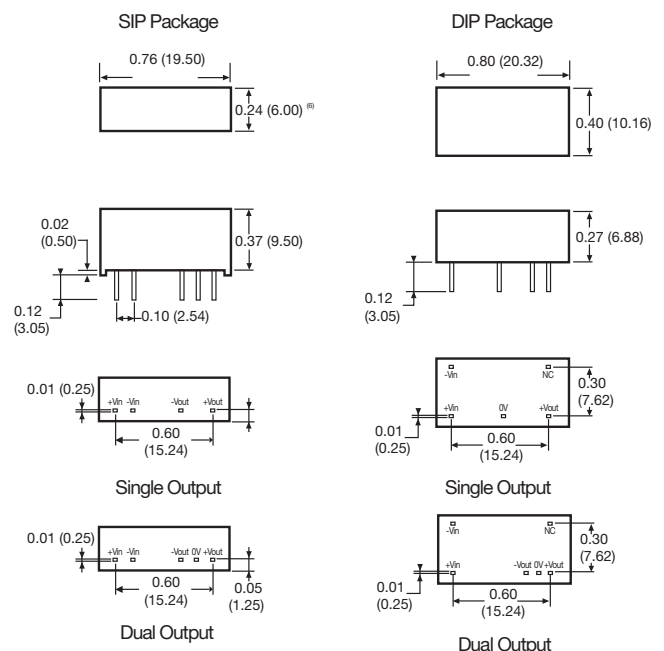
#### Notes

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. All dimensions in inches (mm).
4. For 48 V nominal input, replace the 3rd & 4th digits of the model number with 48 e.g. IV4812SA. A 4.7-47  $\mu$ F capacitor is required across the input.
5. Operation at no load will not damage unit but it may not meet all specifications.
6. 48 V model dimension is 0.28 (7.20).
7. For 6000 VDC isolation, add suffix 'H6'.

Input Voltage	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%	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

† Available from Farnell. See pages 204-206.

### Mechanical Details



Notes:

1. Pin diameter: 0.02 $\pm$ 0.002 (0.5 $\pm$ 0.05)
2. Pin pitch tolerance:  $\pm 0.014$  ( $\pm 0.35$ )
3. Case tolerance:  $\pm 0.02$  ( $\pm 0.5$ )