



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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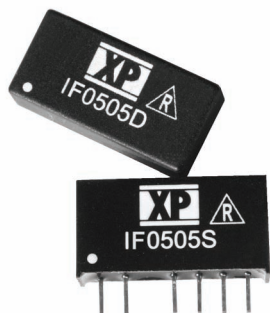
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# 1 Watt

## IF Series



- Regulated Single Output
- SIP or DIP Package
- Low Ripple & Noise
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- MTBF 4.2 Mhrs
- 3 Year Warranty

### Specification

#### Input

- Input Voltage Range • Nominal  $\pm 10\%$
- Input Reflected Ripple Current • 20 mA pk-pk through 12  $\mu\text{H}$  inductor, 5 Hz to 20 MHz
- Input Reverse Voltage Protection • None

#### Output

- Output Voltage • See table
- Minimum Load • None<sup>(3)</sup>
- Line Regulation •  $\pm 0.5\%$  max
- Load Regulation •  $\pm 0.5\%$  max for a 10-100% load change<sup>(3)</sup> ( $\pm 1.0\%$  for 3.3 V output)
- Setpoint Accuracy •  $\pm 2\%$  max
- Ripple & Noise • 50 mV pk-pk max, 20 MHz bandwidth
- Temperature Coefficient •  $0.02\%/^{\circ}\text{C}$
- Maximum Capacitive Load • 220  $\mu\text{F}$

#### General

- Efficiency • See table
- Isolation Voltage • 1000 VDC standard, 3000 VDC option<sup>(2)</sup>
- Isolation Resistance • 1000 M $\Omega$  min
- Isolation Capacitance • 60 pF typical
- Switching Frequency • 36-150 kHz variable
- MTBF • 4.2 Mhrs to MIL-HDBK-217F at 25  $^{\circ}\text{C}$ , GB

#### Environmental

- Operating Temperature •  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  (no derating)
- Storage Temperature •  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Case Temperature •  $+100^{\circ}\text{C}$  max
- Cooling • Convection-cooled

#### Notes

- For DIP package, replace suffix 'S' with suffix 'D'.
- For 3000 VDC isolation, add suffix '-H'.
- Operation at no load will not damage unit but it may not meet all specifications.
- All dimensions in inches (mm).
- Pin pitch tolerance:  $\pm 0.014$  ( $\pm 0.35$ )
- Case tolerance:  $\pm 0.02$  ( $\pm 0.5$ )
- Weight: 0.005 lbs (2.4 g)

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number <sup>(1,2)</sup>
5 V	3.3 V	333 mA	57%	IF0503S
	5.0 V	200 mA	65%	IF0505S
	9.0 V	111 mA	65%	IF0509S
	12.0 V	84 mA	68%	IF0512S
	15.0 V	67 mA	68%	IF0515S
12 V	3.3 V	333 mA	57%	IF1203S
	5.0 V	200 mA	63%	IF1205S
	9.0 V	111 mA	66%	IF1209S
	12.0 V	84 mA	68%	IF1212S
	15.0 V	67 mA	66%	IF1215S
24 V	3.3 V	333 mA	60%	IF2403S
	5.0 V	200 mA	65%	IF2405S
	9.0 V	111 mA	68%	IF2409S
	12.0 V	84 mA	68%	IF2412S
	15.0 V	67 mA	68%	IF2415S

### Mechanical Details

