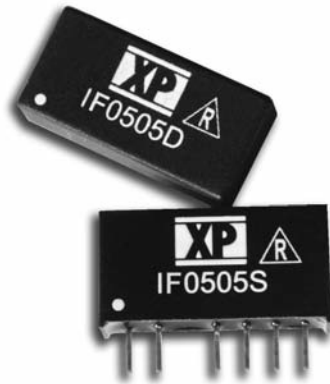


1 Watt

IF Series



- Regulated Single Output
- SIP or DIP Package
- Low Ripple & Noise
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- MTBF 3.5 Mhrs
- 3 Year Warranty

Specification

Input

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

Output

Output Voltage	• See table
Minimum Load	• None ⁽³⁾
Line Regulation	• $\pm 0.5\%$ max
Load Regulation	• $\pm 0.5\%$ max ($\pm 1.0\%$ 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 μ F

General

Efficiency	• See table
Isolation Voltage	• 1000 VDC standard, 3000 VDC option - see note 2
Isolation Resistance	• 1000 M Ω min
Isolation Capacitance	• 60 pF typical
Switching Frequency	• Variable, 50 kHz typical
MTBF	• 3.5 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

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

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number ^(1,2)
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 [†] ^

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

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

Mechanical Details

