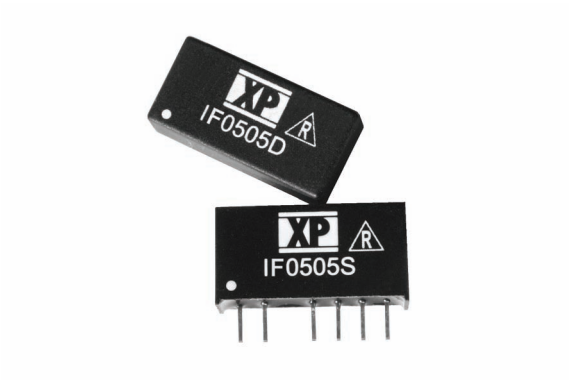
1 Watt
IF Series



- 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 ±10%
Input Reflected Ripple Current	• 20 mA pk-pk through 12 µH inductor, 5 Hz to 20 MHz
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• None[3]
Line Regulation	• ±0.5% max
Load Regulation	• ±0.5% max for a 10-100% load change[3] (±1.0% for 3.3 V output)
Setpoint Accuracy	• ±2% max
Ripple & Noise	• 50 mV pk-pk max, 20 MHz bandwidth
Temperature Coefficient	• 0.02%/°C
Maximum Capacitive Load	• 220 µF

General

Efficiency	• See table
Isolation Voltage	• 1000 VDC standard, 3000 VDC option[2]
Isolation Resistance	• 1000 MΩ min
Isolation Capacitance	• 60 pF typical
Switching Frequency	• 36-150 kHz variable
MTBF	• 4.2 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• -40 °C to +85 °C (no derating)
Storage Temperature	• -40 °C to +125 °C
Case Temperature	• +100 °C max
Cooling	• Convection-cooled

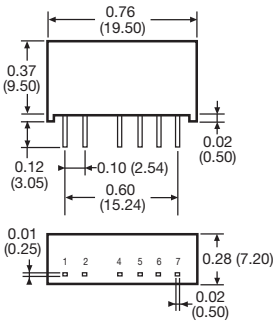
Notes

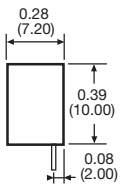
1. For DIP package, replace suffix 'S' with suffix 'D'.
2. For 3000 VDC isolation, add suffix '-H'.
3. Operation at no load will not damage unit but it may not meet all specifications.
4. All dimensions in inches (mm).
5. Pin pitch tolerance: ±0.014 (±0.35)
6. Case tolerance: ±0.02 (±0.5)
7. Weight: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

Mechanical Details

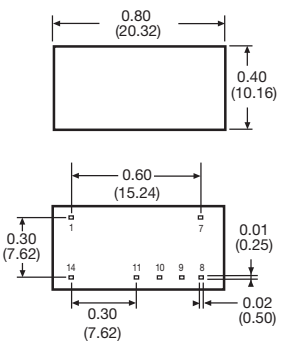
SIP Package

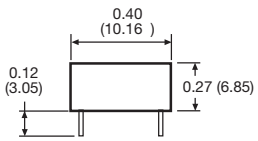




Pin	Standard	'-H' Version
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	No Pin
5	No Pin	-Vout
6	+Vout	No Pin
7	No Pin	+Vout

DIP Package





Pin	Standard	'-H' Version
1	-Vin	-Vin
7	N.C.	N.C.
8	No Pin	+Vout
9	+Vout	No Pin
10	No Pin	-Vout
11	-Vout	No Pin
14	+Vin	+Vin