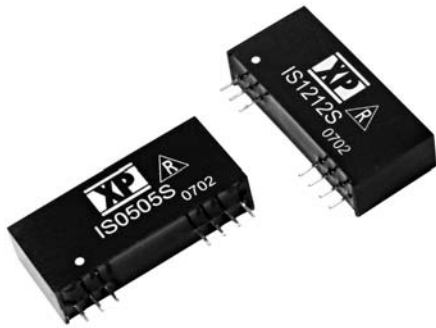


# 3 Watts IS Series



- Regulated Single Output
- SIP Package
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- Continuous Short Circuit Protection
- Non-conductive Black Plastic Case
- MTBF >1.1 Mhrs

## Specification

### Input

- Input Voltage Range • Nominal  $\pm 10\%$   
 Input Current (no load) • See table  
 Input Reflected Ripple • 20 mA pk-pk through 12  $\mu$ H inductor, 5 Hz to 20 MHz

### Output

- Output Voltage • See table  
 Minimum Load • No minimum load required  
 Line Regulation •  $\pm 0.5\%$  max  
 Load Regulation •  $\pm 0.5\%$  max (0% to full load)  
 $\pm 1.5\%$  for 3.3 V versions  
 Setpoint Accuracy •  $\pm 2\%$  max  
 Ripple & Noise • 75 mV pk-pk (20 MHz bandwidth)  
 Temperature Coefficient •  $\pm 0.02\%/^{\circ}\text{C}$   
 Short Circuit Protection • Continuous with auto recovery  
 Maximum Capacitive Load • 470  $\mu$ F

### General

- Efficiency • See table  
 Isolation Voltage • 1000 VDC (3000 VDC -H option)  
 Isolation Capacitance • 60 pF  
 Switching Frequency • 50 kHz typical  
 MTBF • >1.1 Mhrs to MIL-STD 217F

### Environmental

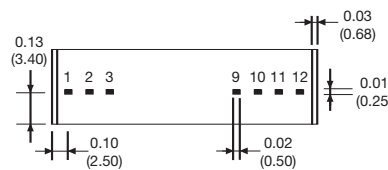
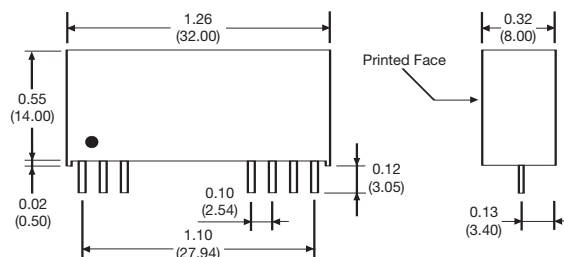
- Operating Temperature •  $-25^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
 Storage Temperature •  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$   
 Case Temperature •  $+100^{\circ}\text{C}$  max  
 Cooling • Convection-cooled  
 Derating • Derate from 100% load at  $+70^{\circ}\text{C}$  to 0% load at  $+85^{\circ}\text{C}$   
 Humidity • Up to 90%, non-condensing

### Notes

1. Add suffix '-H' to model number for 3000 VDC isolation.
2. All dimensions in inches (mm).

Input Voltage	No Load Input Current	Output Voltage	Output Current	Efficiency	Model Number <sup>(1)</sup>
5 V	100 mA	3.3 V	600 mA	53%	IS0503SA
	100 mA	5.0 V	600 mA	62%	IS0505SA
	100 mA	9.0 V	333 mA	67%	IS0509SA
	100 mA	12.0 V	250 mA	70%	IS0512SA
	100 mA	15.0 V	200 mA	68%	IS0515SA
	120 mA	24.0 V	125 mA	64%	IS0524SA
12 V	60 mA	3.3 V	600 mA	55%	IS1203SA
	60 mA	5.0 V	600 mA	60%	IS1205SA
	60 mA	9.0 V	333 mA	67%	IS1209SA
	60 mA	12.0 V	250 mA	69%	IS1212SA
	60 mA	15.0 V	200 mA	70%	IS1215SA
	60 mA	24.0 V	125 mA	68%	IS1224SA
24 V	30 mA	3.3 V	600 mA	54%	IS2403SA
	30 mA	5.0 V	600 mA	61%	IS2405SA
	30 mA	9.0 V	333 mA	65%	IS2409SA
	30 mA	12.0 V	250 mA	70%	IS2412SA
	30 mA	15.0 V	200 mA	71%	IS2415SA
	30 mA	24.0 V	125 mA	71%	IS2424SA

## Mechanical Details



Pin	Standard	'H' Versions
1	+Vin	+Vin
2	N.C.	-Vin
3	N.C.	N.C.
9	N.C.	N.C.
10	-Vout	-Vout
11	+Vout	+Vout
12	-Vin	N.C.