



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!



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1 Watt

- Single & Dual Output
- SMD Package
- Industry Standard Pinouts
- 1000 VDC Isolation, 3000 VDC Optional
- MTBF >3.5 Mhrs
- -40 °C to +85 °C Operation
- 3 Year Warranty



Dimensions:

ISF:
1.50 x 0.295 x 0.246" (12.7 x 7.5 x 6.25 mm)

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage Range	±10			%	% of nominal input
Input Reverse Voltage Protection					None

Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage				V	See Models and Ratings table
Minimum Load	10			%	Operation at no load will not damage device but may not meet all specifications
Line Regulation		1.2 / 1		%	Δ Vin
Load Regulation			7.5	%	For a 10-100% load change
Setpoint Accuracy	100		110	%	of nominal at 10% load
Ripple & Noise			100	mV pk-pk	Single output: 20 MHz bandwidth
			75		Dual output: 20 MHz bandwidth
Temperature Coefficient			0.03	%/°C	

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		75		%	See Models and Ratings table
Isolation	1000			VDC	Standard
	3000				-H version
Isolation Resistance	10 ⁹			Ω	
Switching Frequency		100		kHz	5/12V input at nominal input, full load
		500			24V input at nominal input, full load
Mean Time Between Failure		>3.5		MHrs	MIL-HDBK-217F, +25 °C GB
Weight		0.004 (1.7)		lb (g)	

Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	-40		+85	°C	Full load
Storage Temperature	-55		+125	°C	
Case Temperature			+105	°C	
Cooling					Convection-cooled
Lead Temperature	260 °C, 0.06 in (1.5 mm) from case, 10 s, lead-free solder reflow process IPC/IEDEC J-STP-020D.1				

Models & Ratings: Single Output - Standard

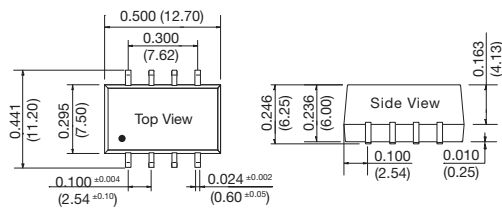
Input Voltage	Output Voltage	Output Current	Isolation	Efficiency	Model Number ⁽⁵⁾
3.3V	3.3V	300 mA	1 kV	73%	ISF0303A
	5.0V	200 mA	1 kV	72%	ISF0305A
5.0V	5.0V	200 mA	1 kV	79%	ISF0505A
	9.0V	110 mA	1 kV	76%	ISF0509A
	12.0V	84 mA	1 kV	79%	ISF0512A
	15.0V	67 mA	1 kV	78%	ISF0515A
12.0V	5.0V	200 mA	1 kV	69%	ISF1205A
	9.0V	110 mA	1 kV	76%	ISF1209A
	12.0V	84 mA	1 kV	73%	ISF1212A
	15.0V	67 mA	1 kV	74%	ISF1215A
24.0V	5.0V	200 mA	1 kV	72%	ISF2405A

Models & Ratings: Single Output - Option 'X'

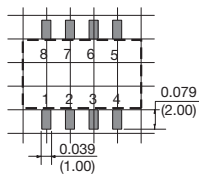
Input Voltage	Output Voltage	Output Current	Isolation	Efficiency	Model Number ⁽⁵⁾
3.3V	3.3V	300 mA	1 kV	73%	ISF0303A-X
5.0V	3.3V	300 mA	1 kV	74%	ISF0503A-X
	5.0V	200 mA	1 kV	77%	ISF0505A-X
	15.0V	67 mA	1 kV	78%	ISF0515A-X

Mechanical Details

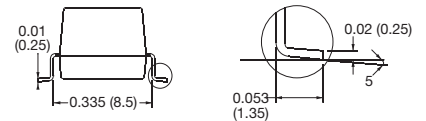
Single Output - Standard



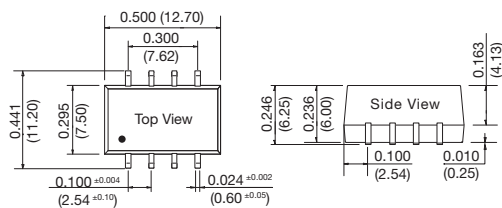
Recommended Footprint
Top View grid: 0.1 x 0.1 in (2.54 x 2.54 mm)



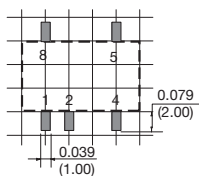
PIN CONNECTIONS					
+Vin	-Vin	-Vout	0 V	+Vout	N/C
2	1	N/A	4	5	3,6,7,8



Single Output - Option '-X'



Recommended Footprint
Top View grid: 0.1 x 0.1 in (2.54 x 2.54 mm)



PIN CONNECTIONS					
+Vin	-Vin	-Vout	0 V	+Vout	N/C
2	1	N/A	4	5	8

Notes

1. All dimensions in inches (mm)
2. Tolerance: ± 0.010 (± 0.25)
3. Weight: 0.004 lbs (1.7 g)
4. Pin tolerance: ± 0.004 (± 0.10 mm)

5. For optional tape & reel option add suffix -TR to the end of the p/n.
Reel quantity = 500

Models & Ratings: Dual Output - Standard

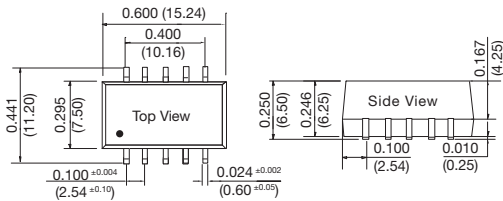
Input Voltage	Output Voltage	Output Current	Isolation	Efficiency	Model Number ⁽⁵⁾
5.0V	±9.0V	55 mA	1 kV	76%	ISF0509
	±12.0V	42 mA	1 kV	79%	ISF0512
	±15.0V	33 mA	1 kV	78%	ISF0515
12.0V	±15.0V	33 mA	1 kV	74%	ISF1215
24.0V	±3.3V	150 mA	1 kV	70%	ISF2403

Models & Ratings: Dual Output - Option 'X'

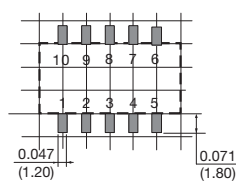
Input Voltage	Output Voltage	Output Current	Isolation	Efficiency	Model Number ⁽⁵⁾
5.0V	±15.0V	33 mA	1 kV	78%	ISF0515-X
24.0V	±3.3V	150 mA	1 kV	70%	ISF2403-X
	±9.0V	55 mA	1 kV	76%	ISF2409-X

Mechanical Details

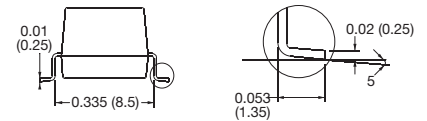
Dual Output - Standard



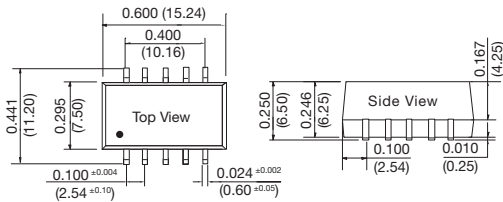
Recommended Footprint
Top View grid: 0.1 x 0.1 in (2.54 x 2.54 mm)



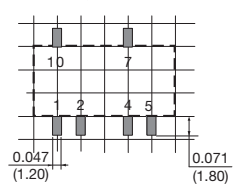
PIN CONNECTIONS					
+Vin	-Vin	-Vout	0 V	+Vout	N/C
2	1	5	4	7	3,6,8,9,10



Dual Output - Option '-X'



Recommended Footprint
Top View grid: 0.1 x 0.1 in (2.54 x 2.54 mm)



PIN CONNECTIONS					
+Vin	-Vin	-Vout	0 V	+Vout	N/C
2	1	5	4	7	10

Notes

1. All dimensions in inches (mm)
2. Tolerance: ±0.010 (±0.25)
3. Weight: 0.004 lbs (1.7 g)

4. Pin tolerance: ±0.004 (±0.10 mm)
5. For optional tape & reel option add suffix -TR to the end of the p/n.
Reel quantity = 500

Models & Ratings: Single Output - Option '-H'

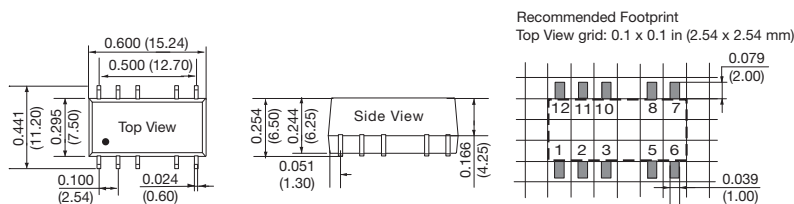
Input Voltage	Output Voltage	Output Current	Isolation	Efficiency	Model Number ⁽⁵⁾
3.3 V	3.3 V	300 mA	3 kV	73%	ISF0303A-H
	5.0 V	200 mA	3 kV	74%	ISF0305A-H
5.0 V	3.3 V	300 mA	3 kV	73%	ISF0503A-H
	5.0 V	200 mA	3 kV	77%	ISF0505A-H
	9.0 V	110 mA	3 kV	76%	ISF0509A-H
	12.0 V	84 mA	3 kV	79%	ISF0512A-H
	15.0 V	67 mA	3 kV	78%	ISF0515A-H
12.0 V	5.0 V	200 mA	3 kV	69%	ISF1205A-H
	9.0 V	110 mA	3 kV	76%	ISF1209A-H
	12.0 V	84 mA	3 kV	73%	ISF1212A-H
	15.0 V	67 mA	3 kV	74%	ISF1215A-H
24.0 V	5.0 V	200 mA	3 kV	72%	ISF2405A-H

Models & Ratings: Dual Output - Option '-H'

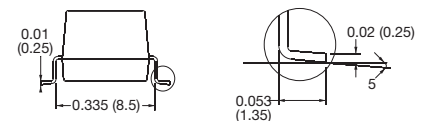
Input Voltage	Output Voltage	Output Current	Isolation	Efficiency	Model Number ⁽⁵⁾
5.0 V	±5.0 V	100 mA	3 kV	76%	ISF0505-H
	±9.0 V	55 mA	3 kV	76%	ISF0509-H
	±12.0 V	42 mA	3 kV	79%	ISF0512-H
	±15.0 V	33 mA	3 kV	78%	ISF0515-H
12.0 V	±9.0 V	55 mA	3 kV	76%	ISF1209-H
	±12.0 V	42 mA	3 kV	79%	ISF1212-H
	±15.0 V	33 mA	3 kV	78%	ISF1215-H

Mechanical Details

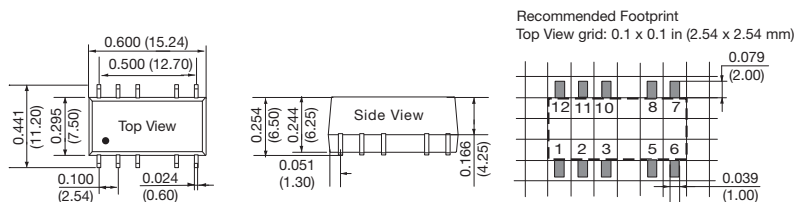
Single Output - Option '-H'



PIN CONNECTIONS					
+Vin	-Vin	-Vout	0 V	+Vout	N/C
2	1	N/A	5	8	3,6,7, 10,11,12



Dual Output - Option '-H'



PIN CONNECTIONS					
+Vin	-Vin	-Vout	0 V	+Vout	N/C
2	1	6	5	8	3,7,10, 11,12

Notes

1. All dimensions in inches (mm)
2. Tolerance: ±0.010 (±0.25)
3. Weight: 0.004 lbs (1.7 g)

4. Pin tolerance: ±0.004 (±0.10 mm)
5. For optional tape & reel option add suffix -TR to the end of the p/n.
Reel quantity = 500