



- 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

Specification

Input

Input Voltage Range	• Nominal $\pm 10\%$
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• 10% ⁽⁶⁾
Line Regulation	• 1.2%/1% Δ Vin
Load Regulation	• 7.5% max for a 10-100% load change
Setpoint Accuracy	• 100-110% of nominal at 10% load
Ripple & Noise	• Single output: 100 mV pk-pk, Dual output: 75 mV pk-pk, 20 MHz bandwidth

Temperature Coefficient • 0.03%/°C

General

Efficiency	• See table
Isolation Voltage	• 1000 VDC standard, 3000 VDC optional
Isolation Resistance	• $10^9 \Omega$
Switching Frequency	• 5/12 V input: 100 kHz, 24 V input: 500 kHz typical at nominal input, full load
MTBF	• >3.5 Mhrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• -40 °C to +85 °C, full load
Storage Temperature	• -55 °C to +125 °C
Case Temperature	• 105 °C max
Cooling	• Convection-cooled
Lead Temperature	• 260 °C, 0.06 in (1.5 mm) from case, 10 s

Connections

No. O/P	Isolation	Pinout	Package	+Vin	-Vin	-Vout	0 V	+Vout	N/C
1	1 kV	Standard	B1	2	1	N/A	4	5	3,6,7,8
1	1 kV	Optional '-X'	B2	2	1	N/A	4	5	8
1	3 kV	Optional '-H'	C1	2	1	N/A	5	8	3,6,7,10,11,12
2	1 kV	Standard	A1	2	1	5	4	7	3,6,8,9,10
2	1 kV	Optional '-X'	A2	2	1	5	4	7	10
2	3 kV	Optional '-H'	C1	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)

Input Voltage	Output Voltage	Output Current	Efficiency (typ)	Model Number ^(4,5)
3.3 VDC	3.3 V	300 mA	73%	ISF0303A ^(1,2,3)
	5.0 V	200 mA	74%	ISF0305A ^(1,2,3)
5 VDC	5.0 V	200 mA	77%	ISF0505A ^(1,2,3)
	9.0 V	110 mA	76%	ISF0509A ^(1,2,3)
	12.0 V	84 mA	79%	ISF0512A ^(1,2,3)
	15.0 V	67 mA	78%	ISF0515A ^(1,2,3)
12 VDC	5.0 V	200 mA	69%	ISF1205A ^(2,3)
	15.0 V	67 mA	74%	ISF1215A ^(1,2,3)
24 VDC	24.0 V	42 mA	77%	ISF2424A

Notes

1. For dual output models, delete suffix 'A' at the end of the part number and split current equally between two outputs.
2. For single output 3000 VDC isolation, add '-H' to the end of the part number.
3. For dual output 3000 VDC isolation, replace 'A' with '-H' in the part number.
4. For package type see connections table.
5. Single & dual output 1 kV models can have optional pinout, add suffix '-X' to part number
6. Operation at no load will not damage device but may not meet all specifications.

Mechanical Details

