IZ Series



- Regulated Single & Dual Output
- Wide 2:1 Input Range
- SIP Package
- 1600 VDC Isolation
- Continuous Short Circuit Protection
- Remote On/Off
- 3 Year Warranty

Specification

Input

Input Voltage Range Input Reflected Ripple Current Input Filter

- See table
- 35 mA pk-pk through 12 µH inductor and 47 μF capacitor, 5 Hz to 20 MHz
- Capacitor

Output

Output Voltage Minimum Load Line Regulation · See table

• None(4)

Load Regulation

• ±0.5% max

Setpoint Accuracy

• ±1.0% max for a 25-100% load change

Ripple & Noise

• ±1% max

Short Circuit Protection • Continuous with auto recovery (foldback)

• 75 mV pk-pk max, 20 MHz bandwidth

Cross Regulation Remote On/Off

• ±5% on dual output models⁽⁵⁾

• Apply 3-6 mA to pin 3 to turn off output. 1k resistor between Pin 3 and Pin 1 (-Vin) will create required current.

Temperature Coefficient • 0.02%/C

General

Efficiency Isolation Voltage Isolation Resistance

See table 1600 VDC

10°Ω

Isolation Capacitance Switching Frequency

• 680 pF • 100-650 kHz

MTBF

>1.34 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature •

-40 °C to +100 °C, derate from 100% load at +70 °C to 0% load at +100 °C

Storage Temperature Case Temperature

• -40 °C to +125 °C +100 °C max

Cooling

· Convection cooled

Safety

Safety Approvals

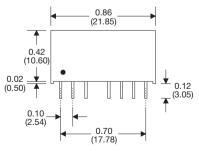
UL60950-1, CAN/CSA C22.2 No.60950-1, UL62368-1

Notes

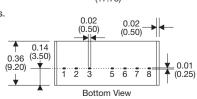
- 1. Measured at nominal input voltage.
- 2. Minimum load of 25% required to meet load regulation & ripple & noise specifications.
- 3. Operation at no load will not damage the part but it may not meet all specifications.
- 4. When one output is set to 100% load and the other varies between 25-100% load.
- 5. Pin pitch tolerance: ±0.014 (±0.35)
- 6. Case tolerance: ±0.02 (±0.5)
- 7. Weight: SIP 0.009 lbs (3.9 g), DIP 0.013 lbs (5.9 g)
- 8. All dimensions in inches (mm)

Input Voltage	No Load ⁽¹⁾ Input Current	Output Voltage	Output Current	Efficiency	Max Capacitive Load	Model Number ⁽²⁾
4.5-9.0 V	65 mA	3.3 V	700 mA	74%	2200 μF	IZ0503SA
	70 mA	5.0 V	600 mA	76%	1000 μF	IZ0505SA
	75 mA	12.0 V	250 mA	82%	470 μF	IZ0512SA
	75 mA	15.0 V	200 mA	82%	220 µF	IZ0515SA
	90 mA	±5.0 V	±300 mA	77%	±470 μF	IZ0505S
	90 mA	±12.0 V	±125 mA	81%	±220 μF	IZ0512S
	90 mA	±15.0 V	±100 mA	82%	±100 μF	IZ0515S
9.0-18.0 V	25 mA	3.3 V	700 mA	76%	2200 μF	IZ1203SA
	35 mA	5.0 V	600 mA	81%	1000 μF	IZ1205SA
	35 mA	12.0 V	250 mA	84%	470 μF	IZ1212SA
	35 mA	15.0 V	200 mA	84%	220 µF	IZ1215SA
	45 mA	±5.0 V	±300 mA	80%	±470 μF	IZ1205S
	45 mA	±12.0 V	±125 mA	83%	±220 μF	IZ1212S
	45 mA	±15.0 V	±100 mA	82%	±100 μF	IZ1215S
18.0-36.0 V	15 mA	3.3 V	700 mA	74%	2200 μF	IZ2403SA
	15 mA	5.0 V	600 mA	79%	1000 μF	IZ2405SA
	20 mA	12.0 V	250 mA	82%	470 μF	IZ2412SA
	20 mA	15.0 V	200 mA	84%	220 µF	IZ2415SA
	20 mA	±5.0 V	±300 mA	80%	±470 μF	IZ2405S
	20 mA	±12.0 V	±125 mA	83%	±220 μF	IZ2412S
	20 mA	±15.0 V	±100 mA	83%	±100 μF	IZ2415S
36.0-72.0 V	10 mA	3.3 V	700 mA	75%	2200 μF	IZ4803SA
	10 mA	5.0 V	600 mA	78%	1000 μF	IZ4805SA
	15 mA	12.0 V	250 mA	81%	470 μF	IZ4812SA
	15 mA	15.0 V	200 mA	81%	220 μF	IZ4815SA
	35 mA	±5.0 V	±300 mA	78%	±470 μF	IZ4805S
	20 mA	±12.0 V	±125 mA	80%	±220 μF	IZ4812S
	20 mA	±15.0 V	±100 mA	81%	±100 μF	IZ4815S

Mechanical Details







PIN CONNECTIONS					
Pin	Single	Dual			
1	-V Input	-V Input			
2	+V Input	+V Input			
3	Remote On/Off	Remote On/Off			
5	N.C.	N.C.			
6	+V Output	+V Output			
7	-V Output	Common			
8	NC	-V Output			

0.44

(11.10)

0.36

