

3 Watts

IZ Series



- Regulated Single & Dual Output
- Wide 2:1 Input Range
- SIP Package
- 1600 VDC Isolation
- Optional Metal Case
- Continuous Short Circuit Protection
- MTBF >2.4 MHrs

Specification

Input

Input Voltage Range	• 5 V models: 4.5 - 9.0 V • 12 V models: 9.0 - 18.0 V • 24 V models: 18.0 - 36.0 V • 48 V models: 36.0 - 72.0 V
Input Reflected Ripple	• 35 mA pk-pk through 12 μH inductor • 5 Hz to 20 MHz
Input Current	• See table
Input Filter	• Capacitor

Output

Output Voltage	• See table
Line Regulation	• $\pm 0.5\%$ max
Load Regulation	• $\pm 1.0\%$ max from 25-100% load
Setpoint Accuracy	• $\pm 1\%$ max
Start Up Rise Time	• 20 ms typical
Ripple & Noise	• 75 mV pk-pk max 20 MHz BW
Temperature Coefficient	• 0.02%/°C
Short Circuit Protection	• Continuous with auto recovery
Cross Regulation	• $\pm 5\%$ on dual output models
Transient Response	• $\pm 3\%$ deviation recovering to <1% within 300 μs for 25% load change
Maximum Capacitive Load	• See table
Remote On/Off	• Applying 5 V via 1 kΩ current limiting resistor (with respect to -V Input) turns output off

General

Efficiency	• See table
Isolation Voltage	• 1600 VDC,
Isolation Resistance	• $10^9 \Omega$
Isolation Capacitance	• 680 pF typical
Switching Frequency	• 100-650 kHz
MTBF	• >2.4 MHrs to MIL-STD-217F

Physical

Case Material	• Non-conductive black plastic (UL94V-0 rated). Optional metal: nickel coated copper (see note 2)
Pin Material	• C5191R-H solder coated
Potting Material	• Epoxy (UL94V-0 rated)
Lead Soldering Temperature	• 260 °C 1.5 mm from case for 10 s

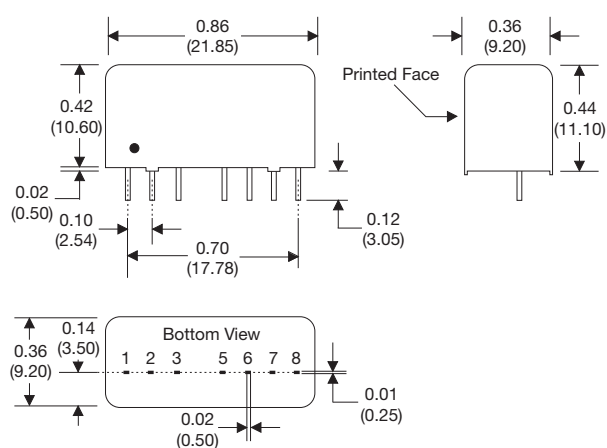
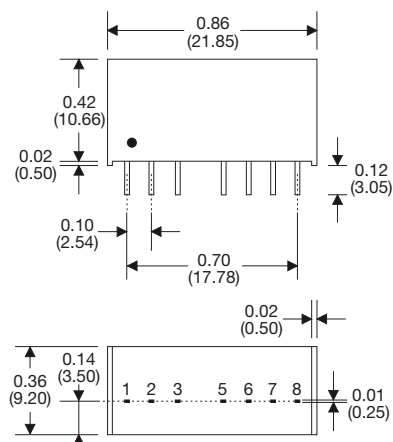
Environmental

Operating Temperature	• -40 °C to +70 °C, derate from 100% load at 70 °C to 0% load at 100 °C
Storage Temperature	• -40 °C to +125 °C
Case Temperature	• 100 °C max
Cooling	• Convection-cooled
Humidity	• 95% RH, non condensing

1. Measured at nominal input voltage.
2. For optional metal case, add suffix '-M' to model number.

Mechanical Details

SIP Package - Nickel Coated Copper Case



Dimensions are in inches (mm)
Weight: Plastic case = 4.5 g
Metal case = 6.5 g

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