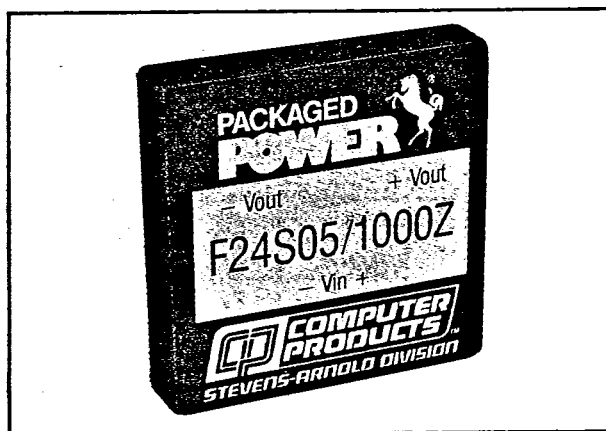




F SERIES Single Output

- Less than 1.0 mV RMS Ripple
- Linear Regulation
- Triple Fault Protection
- Low Profile 0.38 Inch High
- High Isolation
- Six-Sided Continuous Shield

The F Series consists of 16 single output DC/DC converters. All models in this series feature 500 VDC minimum isolation with only 1 mV RMS (40 mV P-P) ripple and noise. All models offer thermal shutdown plus short-circuit protection, with OVP standard on 5 volt outputs. These units are encapsulated in $2.0 \times 2.0 \times 0.38$ inch six-sided metal cases for EMI/RFI suppression. A Pi-type input filter is included to reduce reflected ripple. Reliable operation is assured through the use of efficient, design-derated components and by heat-sinking all dissipating elements directly to the metal case. This permits operation from -25°C to $+71^{\circ}\text{C}$ with no derating or additional heat sinking required.

STOCKED BY YOUR LOCAL DISTRIBUTOR
See list on pages 175 & 176



STEVENS-ARNOLD INC.

(617) 268-1170

SPECIFICATIONS

All Specifications Typical at Nominal Line, Full Load, and 25°C Unless Otherwise Noted.

OUTPUT SPECIFICATIONS

Voltage Accuracy $\pm 1.0\%$, max.
Ripple and Noise, 20 MHz BW 1 mV RMS, max.
40 mV P-P, max.
Temperature Coefficient $\pm 0.02\%/^{\circ}\text{C}$, max.
Voltage Stability, 24 Hours $\pm 0.02\%$, max.
Transient Recovery Time, $\pm 0.5\%$ Error Band
FL-NL 75 $\mu\text{sec.}$, max.
FL-50%L 25 $\mu\text{sec.}$, max.
Short Circuit Protection Current Limit. 160% I_{out}
Thermal Shutdown,

All Models Output Current Limited
Overvoltage Protection, 5 Volt Outputs Only
Internal Clamp 6.8 VDC

INPUT SPECIFICATIONS

Input Voltage Range See Table Below
Input Filter Pi Network

GENERAL SPECIFICATIONS

Isolation Voltage 500 VDC, min.
Isolation Resistance 10^9 ohms, min.
Switching Frequency 20 kHz

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range ... -25°C to $+71^{\circ}\text{C}$
Derating None
Storage Temperature Range ... -40°C to $+100^{\circ}\text{C}$
Case Temp. Rise Above Ambient ... $10^{\circ}\text{C}/\text{watt Diss.}$
Cooling Free-Air Convection
EMI/RFI Six-Sided Continuous Metal Case

PHYSICAL SPECIFICATIONS

Weight 3.5 oz. (98 grams)
Case Material Black Coated Copper
with Non-Conductive Base
Mating Socket MS-Z

Input Voltage Range	
Nominal	Range
5V	4.75-5.5V
12V	10.8-14V
24V	21-28V
28V	24-32V
48V	42-56V

TWO-YEAR WARRANTY



5 Watt DC/DC Converters

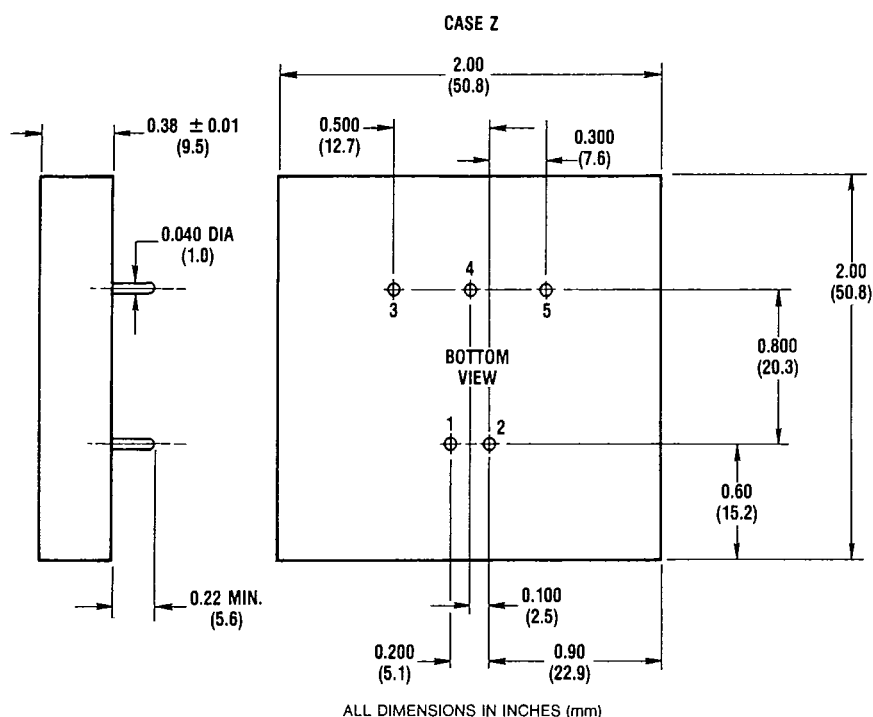
T-57-11

INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF	REGULATION ¹		CASE	MODEL NUMBER
			NO LOAD	FULL LOAD		LINE ²	LOAD ³		
5 VDC	5 VDC	1000 mA	130 mA	1500 mA	67	±0.1%	±0.1%	Z	F05S05/1000Z
5 VDC	12 VDC	500 mA	155 mA	1800 mA	66	±0.1%	±0.1%	Z	F05S12/500Z
5 VDC	15 VDC	350 mA	157 mA	1520 mA	69	±0.1%	±0.1%	Z	F05S15/350Z
12 VDC	5 VDC	1000 mA	40 mA	635 mA	66	±0.1%	±0.1%	Z	F12S05/1000Z
12 VDC	12 VDC	500 mA	40 mA	750 mA	67	±0.1%	±0.1%	Z	F12S12/500Z
12 VDC	15 VDC	350 mA	45 mA	645 mA	68	±0.1%	±0.1%	Z	F12S15/350Z
24 VDC	5 VDC	1000 mA	20 mA	330 mA	63	±0.1%	±0.1%	Z	F24S05/1000Z
24 VDC	12 VDC	500 mA	21 mA	405 mA	62	±0.1%	±0.1%	Z	F24S12/500Z
24 VDC	15 VDC	350 mA	28 mA	335 mA	65	±0.1%	±0.1%	Z	F24S15/350Z
28 VDC	5 VDC	1000 mA	20 mA	290 mA	62	±0.1%	±0.1%	Z	F28S05/1000Z
28 VDC	12 VDC	500 mA	20 mA	345 mA	62	±0.1%	±0.1%	Z	F28S12/500Z
28 VDC	15 VDC	350 mA	20 mA	290 mA	65	±0.1%	±0.1%	Z	F28S12/350Z
48 VDC	5 VDC	1000 mA	15 mA	165 mA	63	±0.1%	±0.1%	Z	F48S05/1000Z
48 VDC	6 VDC	1000 mA	15 mA	200 mA	63	±0.1%	±0.1%	Z	F48S06/1000Z
48 VDC	12 VDC	500 mA	15 mA	205 mA	61	±0.1%	±0.1%	Z	F48S12/500Z
48 VDC	15 VDC	350 mA	15 mA	180 mA	61	±0.1%	±0.1%	Z	F48S15/350Z

NOTES: 1. Maximum.

2. Measured from High Line to Low Line.

3. Measured from Full Load to No Load.



ALL DIMENSIONS IN INCHES (mm)

Pin Connections	
Pin	Function
1	+ Input
2	- Input
3	+ Output
4	No Pin
5	- Output

Tolerance .xx = ±0.04
 .xxx = ±0.005