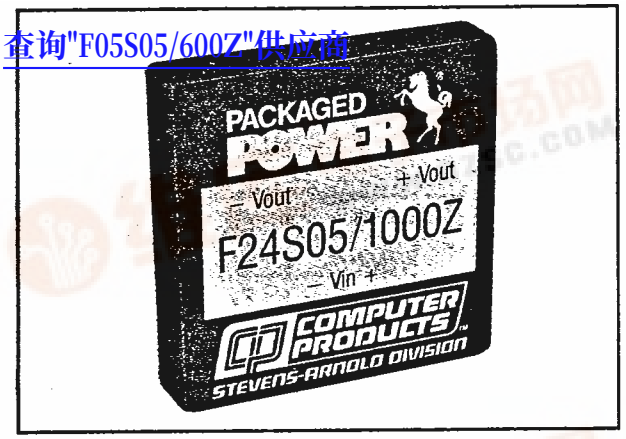
T-57-11



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 mininum 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 × 2.0 × 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°C with no derating or additional heat sinking required.

SPECIFICATIONS

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

OUTPUT SPECIFICATIONS

Voltage Accuracy ..... ±1.0%, max.
Ripple and Noise, 20 MHz BW .... 1 mV RMS, max.
40 mV P-P, max.
Temperature Coefficient ..... ±0.02%/°C, max.
Voltage Stability, 24 Hours..... ±0.02%, max.
Transient Recovery Time, ±0.5% Error Band
FL–NL..... 75 μsec., max.
FL–50%L..... 25 μsec., 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°C
Derating ..... None
Storage Temperature Range ... −40°C to +100°C
Case Temp. Rise Above Ambient ... 10°C/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

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(617) 268-1170

TWO-YEAR WARRANTY

COMPUTER PRODUCTS
STEVENS-ARNOLD INC.

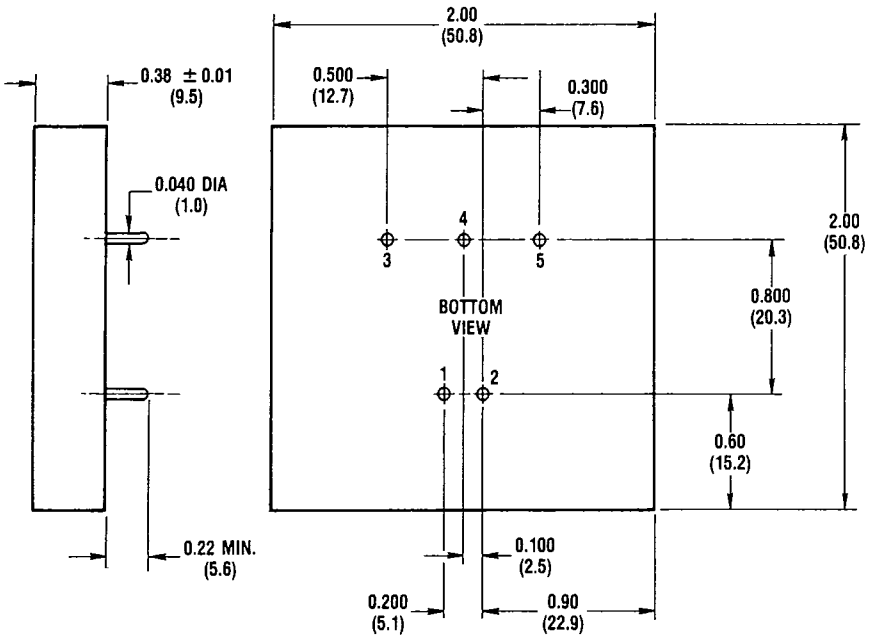
T-57-11

5 Watt DC/DC Converters

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.

CASE Z



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