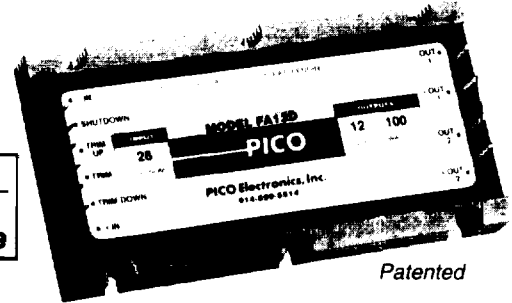


MILITARY SERIES FA (-40°C to +85°C Operating Temperature) SERIES MA (-55°C to +85°C Operating Temperature)

**Isolated Regulated 100 Watts
DC-DC Converters
Wide Input Range/18-36 VDC
Fully Regulated
Short Circuit Protected
Parallel Operation**

Parallel
Operation
Add Suffix P
to: FA5SP

**Dual Isolated Outputs
Special Voltage
Combinations Available**



The new PICO Series FA and Series MA of high power DC-DC Converters, allow a wide input voltage of 18-36 VDC, while maintaining a regulated output. They are fully safeguarded for over voltage, over temperature and continuous short circuit protection.

The availability of Dual Isolated Outputs, small size, and the capability of parallel operations as standard features should reduce your design and component costs, while the fixed frequency operation helps parallel connections for higher power requirements.

This high density unit is assembled in the USA with PICO quality and component selection, allowing it to meet the most stringent military requirements.

SERIES FA/MA SINGLE • 100 WATTS • INPUT 18-36 VDC

INPUT VOLTAGE RANGE (V DC)	OUTPUT VOLTAGE (V DC)	MAX. OUTPUT POWER (W)	EFF. FULL LOAD TYPICAL (%)	MAX. LOAD REGULATION (%)**		MAX. LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE (FULL LOAD) (1-1MHz BW) (mV P-P)	OUTPUT VOLTAGE TOLERANCE (%)	Series FA Single (-40°C to +85°C)		Series MA Single (-55°C to +85°C)	
				10-50%	50-100%	18-28V	28-36V			PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
18-36	3.3	50	74	2.00	2.00	1.50	1.50	50	2.0	FA3.3S	208.00	MA3.3S	312.00
18-36	5	75	76	2.00	2.00	1.50	1.50	50	2.0	FA5S	208.00	MA5S	312.00
18-36	5.2	75	76	2.00	2.00	1.50	1.50	50	2.0	FA5.2S	208.00	MA5.2S	312.00
18-36	9	100	81	1.50	1.50	1.25	1.25	50	1.5	FA9S	208.00	MA9S	312.00
18-36	12	100	83	1.25	1.25	1.00	1.00	50	1.0	FA12S	208.00	MA12S	312.00
18-36	15	100	84	1.00	1.00	0.75	0.75	50	1.0	FA15S	208.00	MA15S	312.00
18-36	24	100	86	0.75	0.75	0.50	0.50	50	1.0	FA24S	208.00	MA24S	312.00
18-36	28	100	86	0.50	0.50	0.50	0.50	50	0.50	FA28S	208.00	MA28S	312.00
18-36	48	100	86	0.50	0.50	0.50	0.50	50	0.50	FA48S	208.00	MA48S	312.00
18-36	100	100	85	0.50	0.50	0.50	0.50	50	0.50	FA100S	208.00	MA100S	312.00

10% Minimum load required at all times

**Reading taken at nominal 28 VDC input

*Using proper thermal management, maximum temp. of +85°C (case)

FEATURES:

- Dual isolated outputs
- Short circuit protection
- Input voltage protection
- Thermal, over temp. shutdown
- Line regulation
- Load regulation
- No external components required
- Hi density, hi efficiency design
- Remote shutdown
- Trim capabilities
- Fixed frequency-100 KHz

TYPICAL CHARACTERISTICS:

Frequency: 100 KHz

Base plate: Max. +85°C

Operating Temp.: See thermal chart, -40°C to +85°C base plate

-55°C to +85°C base plate

Test conditions: 25°C ambient

Isolation Base Input: 2000 VDC

Isolation Input Output: 2000 VDC

Isolation Output to Base: 1000 VDC

Storage Temp.: -55°C to +105°C

For All Variations See Factory

SERIES FA/MA DUAL • 100 WATTS • INPUT 18-36 VDC

INPUT VOLTAGE RANGE (V DC)	OUTPUT VOLTAGE (V DC)	MAX. OUTPUT POWER (W)	EFF. FULL LOAD TYPICAL (%)	MAX. LOAD REGULATION (%)**		MAX. LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE (FULL LOAD) (1-1MHz BW) (mV P-P)	OUTPUT VOLTAGE TOLERANCE (%)	Series FA Dual (-40°C to +85°C)		Series MA Dual (-55°C to +85°C)	
				10-50%	50-100%	18-28V	28-36V			PICO PART NUMBER	PRICE	PICO PART NUMBER	PRICE
18-36	5	37.5/37.5	76	2.00	2.00	1.50	1.50	50	2.0	FA5D	298.00	MA5D	447.00
18-36	9	50/50	81	1.50	1.50	1.25	1.25	50	1.5	FA9D	298.00	MA9D	447.00
18-36	12	50/50	83	1.25	1.25	1.00	1.00	50	1.0	FA12D	298.00	MA12D	447.00
18-36	15	50/50	84	1.00	1.00	0.75	0.75	50	1.0	FA15D	298.00	MA15D	447.00
18-36	24	50/50	85	0.75	0.75	0.50	0.50	50	1.0	FA24D	298.00	MA24D	447.00
18-36	28	50/50	86	0.50	0.50	0.50	0.50	50	0.5	FA28D	298.00	MA28D	447.00
18-36	48	50/50	86	0.50	0.50	0.50	0.50	50	0.5	FA48D	298.00	MA48D	447.00

10% Minimum load required at all times

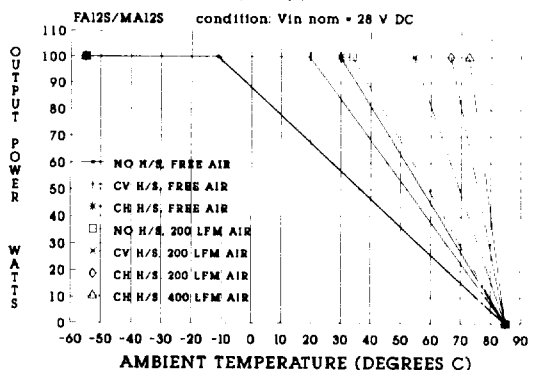
**Reading taken at nominal 28 VDC input

*Using proper thermal management, maximum temp. of +85°C (case) ***Balance Load

34 Standard Models

**Application Notes
Page 124
Mechanical
Configuration
Pages 125-129**

Full thermal analysis can be determined using application notes on page 124. By using the efficiency and thermal resistance of your desired unit to the formula you can complete your evaluation. The curves below were generated for Part #FA12S/MA12S using Application Notes. Please consult factory with any questions.



For immediate engineering assistance or to order—
Call Toll Free 800-431-1064

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