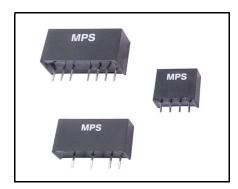
# ADC400 SERIES

# 1W, Ultra-High Isolation SIP, Single & Dual Output DC/DC Converters





Selection	n Gulde				
Model Number	Input Voltage	Output Voltage	Output Current	Efficiency	Load Regulation
	VDC	VDC	mA	% Тур.	% Max.
ADC401		5	200	66	10
ADC402		12	80	66	8
ADC403	5	15	65	66	8
ADC404	(4.5 - 5.5)	±5	±100	66	10
ADC405		±12	±40	72	8
ADC406		±15	±35	73	8
ADC411		5	200	66	10
ADC412	12 (10.8 - 13.2)	12	80	66	8
ADC413		15	65	66	8
ADC414		±5	±100	66	10
ADC415		±12	±40	74	8
ADC416		±15	±35	75	8

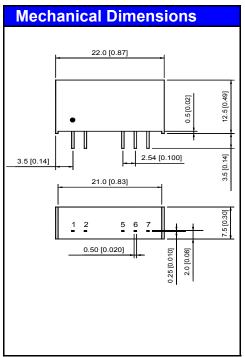
### **Key Features**

- Efficiency up to 75%
- 6000VDC Isolation
- MTBF > 2,000,000 Hours
- Low Cost
- Input 5 and 12VDC
- Output 5, 12, 15, ±5, ±12 and ±15VDC
- Temperature Performance -25°C to +70°C
- UL 94V-0 Package Material
- Internal SMD Construction
- Industry Standard Pin-out

MPS Industries ADC400 1W DC/DC's are specially designed to provide ultra-high levels of isolation 6000VDC in a miniature SIP package.

The series consists of 12 models with input voltages of 5V and 12VDC which offers standard output voltages of 5V, 12V, 15VDC in both single and dual output configurations.

The ADC400 series is an excellent selection for a variety of applications including distributed power systems, mixed analog/digital subsystems, portable test equipments, local power networks and battery backed systems.



Pin Connections					
Pin	Singles	Duals			
1	+Vin	+Vin			
2	-Vin	-Vin			
5	-Vout	-Vout			
6	No Pin	Common			
7	+Vout	+Vout			

#### Case Size –

22.0x7.5x12.5mm (0.87x0.30x0.49inch)

#### Case Material –

Non-Conductive Black Plastic

#### Weight -

3.9g (0.14Oz)

Tolerance	Millimeters	Inches
	X.X±0.25	X.XX±0.01
	X.XX±0.13	X.XXX±0.005
Pin	±0.05	±0.002

Tel: (310) 533-1455 Fax: (310) 533-1853

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Absolute Maximum Ratings						
Parameter		Min.	Max.	Units		
Input Surge Voltage (1000mS)	5VDC Input Models	-0.7	9	VDC		
	12VDC Input Models	-0.7	18	VDC		
Lead Temperature (1.5mm from case for 10sec.)			260	°C		
Internal Power Dissipation			650	mW		

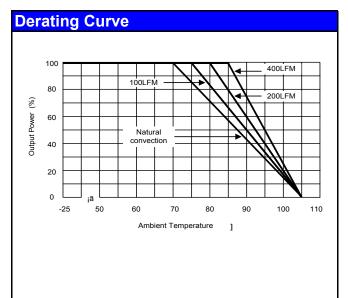
Exceeding the unit absolute maximum ratings could cause damage. These are not continuous operating ratings.

General Characteristics					
Parameter	Conditions	Min.	Тур.	Max.	Units
Isolation Voltage	60 Seconds	6000			VDC
Isolation Resistance	500VDC	10			GΩ
Isolation Capacitance	100kHz, 1V		15	20	pF
Switching Frequency		50	80	100	kHz
MTBF	MIL-HDBK-217F @25°C Ground Benign	2		-	MHrs

Environmental Characteristics					
Parameter	Conditions	Min.	Max.	Units	
Operating Temperature	Ambient	-25	70	°C	
Operating Temperature	Case	-25	90	°C	
Storage Temperature		-40	125	°C	
Humidity			95	%	
Cooling	Free-Air Convection				

Output Characteristics							
Parameter	Conditions	Min.	Тур.	Max.	Units		
Line Regulation	For Vin Change of 1%		±1.2	±1.5	%		
Load Regulation	lo = 20% to 100%	See Selection Guide %		%			
Ripple & Noise	20MHz BW		100	150	mV P-P		
Short Circuit	0.5 Second Max.						

Maximum Capacitive Load						
Models by Output Voltage	Singles	Duals	Units			
(Each Output on Duals)	680	220	uF			



#### Notes:

- 1. Specifications typical at Ta=+25°C, resistive load, nominal input voltage, rated output current unless otherwise noted.
- 2. These power converters require a minimum output load to maintain specified regulation.
- 3. Operation under no-load conditions will not damage these modules; however, they may not meet all specifications listed.
- 4. All DC/DC converters should be externally fused at the front end for protection.
- 5. Other input and output voltage may be available, please contact factory.
- 6. All specifications subject to change without notice.
- 7. For detailed data sheet, please visit our website.