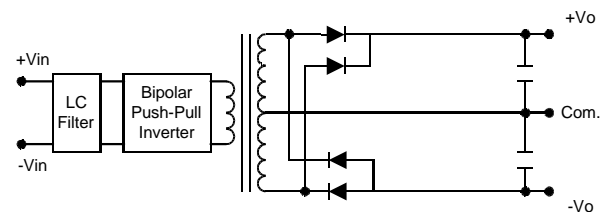
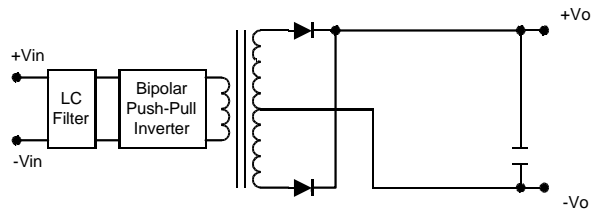
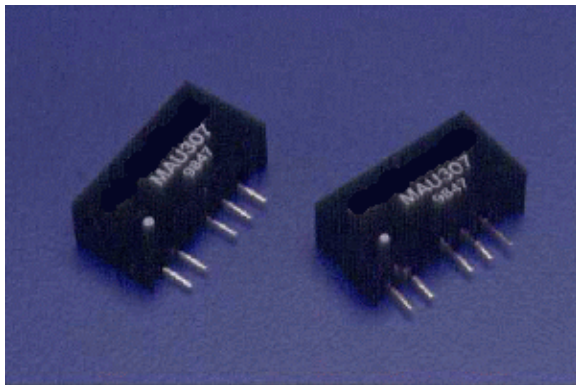


# TOTAL POWER INT'L

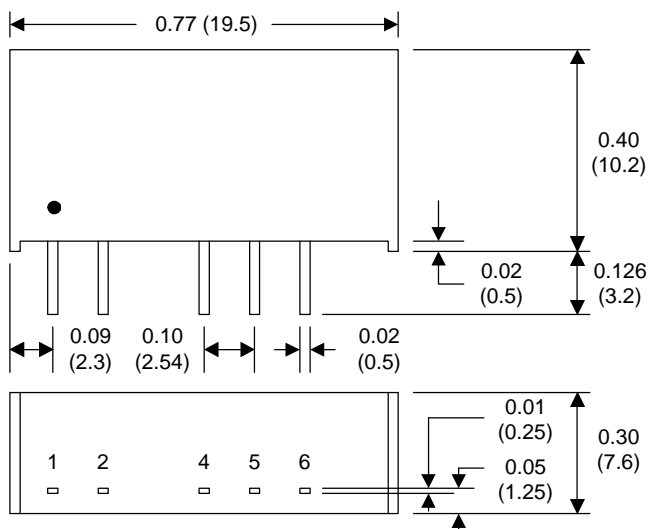
## MAU300 Series 2 Watt Ultra Miniature High Isolation SIP DC/DC Single & Dual Output

### Key Features

- SMT Technology
- Miniature Package
- I / O isolation 1000VDC
- Efficiency Up To 83%
- MTBF > 2,000,000 Hours
- Low Cost



### Mechanical Configuration



All dimensions typical in inches (mm). Tolerance= +/- 0.01 (+/- 0.25)

### Pin Connections

Pin	Single Output	Dual Output
1	+Input	+Input
2	-Input	-Input
4	-Output	-Output
5	No Pin	Common
6	+Output	+Output

### Physical Characteristics

Case Size	19.5×7.6×10.2 mm 0.77×0.30×0.40 inches
Case Material	Non-Conductive Black Plastic
Weight	2.7g

TOTAL POWER INT'L Tel: 877-646-0900 Fax: 978-453-7395

Email: [sales@total-power.com](mailto:sales@total-power.com) <http://www.total-power.com>

# TOTAL POWER INT'L MAU300

## Absolute Maximum Ratings

Exceeding these values can damage the module. These are not continuous operating ratings.

Parameter		Min.	Max.	Unit.
Input Surge Voltage ( 1000 mS )	5VDC Input Models	-0.7	9	VDC
	12VDC Input Models	-0.7	18	VDC
	24VDC Input Models	-0.7	30	VDC
Internal Power Dissipation		---	650	mW

## Environmental Specifications

Parameter	Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		-25	---	+70	°C
Storage Temperature		-40	---	+125	°C
Humidity		---	---	95	%
Cooling	Free-Air Convection				

## Model Selection Guide

Model Number	Input voltage VDC	Output Voltage VDC	Output Current mA (Max.)	Output Current mA (Min.)	Input Current Max. Load mA (Typ.)	Input Current No Load mA (Typ.)	Load Regulation % (Max.)	Efficiency % (Typ.)
MAU301	5 (4.5 ~ 5.5)	3.3	500	10	452	60	11	73
MAU302		5	400	8	526		11	76
MAU303		12	165	3	495		7	80
MAU304		15	133	2.5	499		7	80
MAU305		±5	±200	±4	519		10	77
MAU306		±12	±83	±1.5	504		7	79
MAU307		±15	±66	±1	501		7	79
MAU311	12 (10.8 ~ 13.2)	3.3	500	10	185	30	8	74
MAU312		5	400	8	212		8	78
MAU313		12	165	3	200		5	82
MAU314		15	133	2.5	200		5	83
MAU315		±5	±200	±4	210		8	79
MAU316		±12	±83	±1.5	201		5	82
MAU317		±15	±66	±1	200		5	82
MAU321	24 (21.6 ~ 26.4)	3.3	500	10	92	15	8	74
MAU322		5	400	8	108		8	77
MAU323		12	165	3	101		5	81
MAU324		15	133	2.5	101		5	82
MAU325		±5	±200	±4	105		8	79
MAU326		±12	±83	±1.5	102		5	81
MAU327		±15	±66	±1	100		5	82

Specifications typical at Ta=+25J ,resistive load,nominal input voltage,rated output current unless otherwise noted.

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# TOTAL POWER INT'L MAU300

## Input Specifications

Parameter	Model	Min.	Typ.	Max.	Unit
Input Voltage Range	5V Input Models	4.5	5	5.5	VDC
	12V Input Models	10.8	12	13.2	
	24V Input Models	21.6	24	26.4	
Reverse Polarity Input Current	All Models	----	----	0.3	A
Input Filter		Pi Filter			

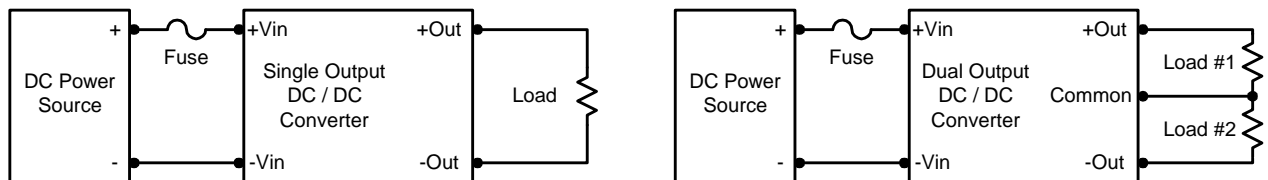
## Output Specifications

Parameter	Conditions	Min.	Typ.	Max.	Unit
Output Voltage Accuracy		----	±1.0	±3.0	%
Output Voltage Balance	Dual Output Balance Load	----	±0.1	±1.0	%
Line Regulation	For Vin Change 1%	----	±1.2	±1.5	%
Load Regulation	Io=20% to 100%	See Model Selection Guide			%
Ripple & Noise (20MHz)		----	100	150	mV P-P
Ripple & Noise (20MHz)	Over Line, Load & Temp.	----	----	200	mV P-P
Ripple & Noise (20MHz)		----	----	5	mV rms.
Over Load		120	----	----	%
Temperature Coefficient		----	±0.01	±0.02	%/°C
Output Short Circuit	0.5 Second Max.				

## General Specification

Parameter	Conditions	Min.	Typ.	Max.	Unit
Rated Isolation Voltage	60 Seconds	1000	----	----	VDC
Isolation Resistance	500VDC	1000	----	----	MΩ
Isolation Capacitance	100KHz, 1V	----	80	120	pF
Switching Frequency		50	80	100	kHz

## Typical Applications



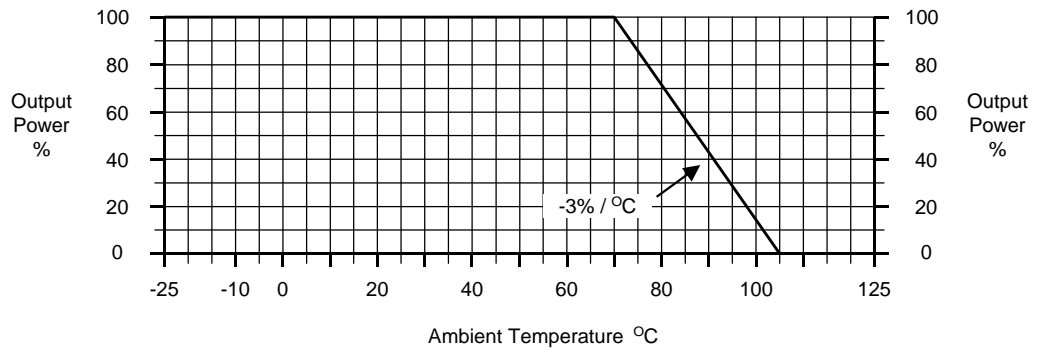
## Input Fuse Selection Guide

5V Input Models	12V Input Models	24V Input Models
1000mA Slow – Blow Type	500mA Slow – Blow Type	200mA Slow – Blow Type

# TOTAL POWER INT'L

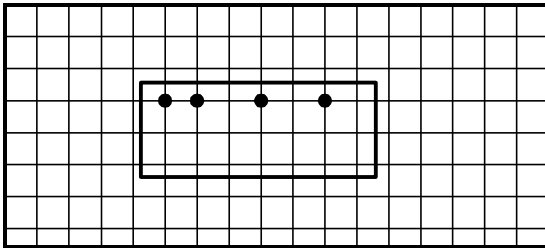
## MAU300

### Derating Curve

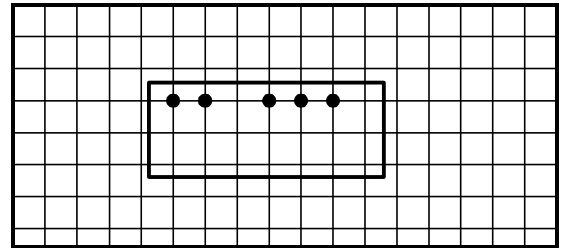


### Connecting Pin Patterns (2.54 mm / 0.1 inch grids )

#### Single Output



#### Dual Output



### NOTE:

1. Specifications typical at  $T_a = +25^\circ\text{C}$ , resistive load, nominal input voltage, rated output current unless otherwise noted.
2. Other input and output voltage may be available, Please contact factory.
3. Specifications subject to change without notice.