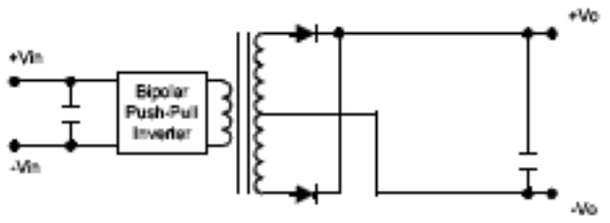
TOTAL POWER INT'L

MAU200 Series1 Watt Ultra Miniature High Isolation SIP DC/DC

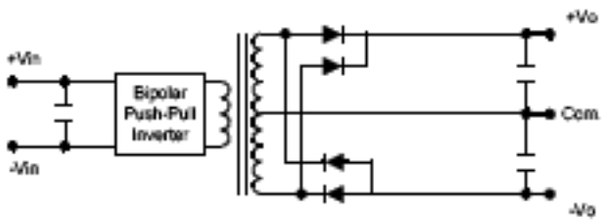
Single & Dual Output

Key Features

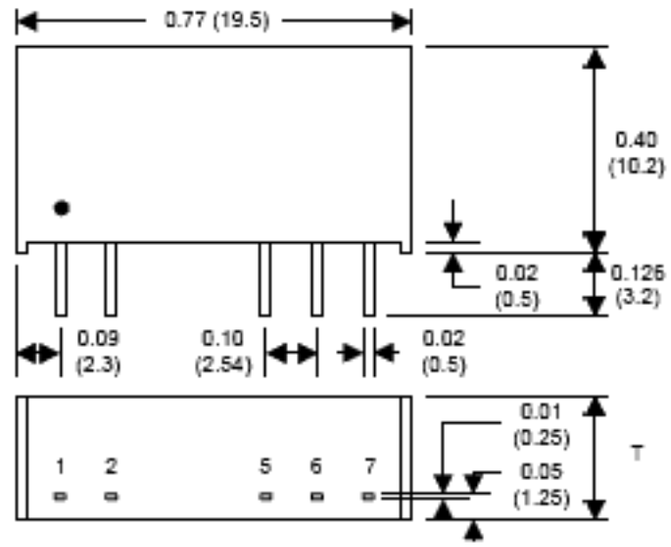
- SMT Technology
- Miniture Package
- I / O Isolation 3000VDC
- Efficiency Up To 81%
- MTBF > 2,000,000 Hours
- Low Cost







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
5	−Output	−Output
6	No Pin	Common
7	+Output	+Output

Physical Characteristics

Case Size (5 & 12V Input)	19.5×6.1×10.2 mm 0.77×0.24×0.40 inches
Case Size (24V Input)	19.5×7.1×10.2 mm 0.77×0.28 ×0.40 inches
Case Material	Non−Conductive Black Plastic
Weight	2.1g(5 & 12V Input) 2.6g(24V Input)

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

TOTAL POWER INT'L
MAU200

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		−−−	450	mW

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.)
MAU201	5 (4.5 ~ 5.5)	3.3	260	5	235	30	10	73
MAU202		5	200	4	281		10	71
MAU203		9	110	2	260		8	76
MAU204		12	84	1.5	258		7	78
MAU205		15	67	1	258		7	78
MAU206		±5	±100	±2	278		10	72
MAU207		±9	±56	±1	262		8	77
MAU208		±12	±42	±0.8	258		7	78
MAU209		±15	±34	±0.7	258		7	79
MAU211	12 (10.8 ~ 13.2)	3.3	260	5	96	12	8	74
MAU212		5	200	4	114		8	73
MAU213		9	110	2	106		5	78
MAU214		12	84	1.5	105		5	80
MAU215		15	67	1	104		5	80
MAU216		±5	±100	±2	113		8	74
MAU217		±9	±56	±1	106		5	79
MAU218		±12	±42	±0.8	104		5	81
MAU219		±15	±34	±0.7	105		5	81
MAU221	24 (21.6 ~ 26.4)	3.3	260	5	49	7	8	73
MAU222		5	200	4	59		8	71
MAU223		9	110	2	54		5	76
MAU224		12	84	1.5	54		5	78
MAU225		15	67	1	53		5	79
MAU226		±5	±100	±2	58		8	72
MAU227		±9	±56	±1	55		5	76
MAU228		±12	±42	±0.8	53		5	79
MAU229		±15	±34	±0.7	53		5	80

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

Environmental Specifications

Parameter	Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		−25	−−−	+85	℃
Storage Temperature		−40	−−−	+125	℃
Humidity		−−−	−−−	95	%
Cooling	Free−Air Convection				

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		Internal Capacitor			

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)		−−−	65	100	mV P−P
Ripple & Noise (20MHz)	Over Line,Load & Temp.	−−−	−−−	150	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.				

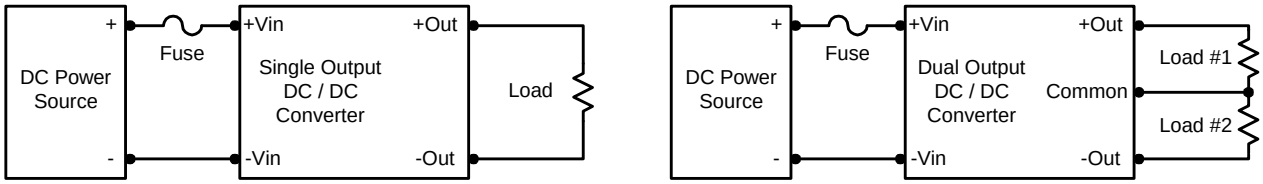
General Specification

Parameter	Conditions	Min.	Typ.	Max.	Unit
Rated Isolation Voltage	60 Seconds	3000	−−−	−−−	VDC
Isolation Resistance	500VDC	10	−−−	−−−	GΩ
Isolation Capacitance	100KHz,1V	−−−	60	100	pF
Switching Frequency		70	100	120	kHz

Input Fuse Selection Guide

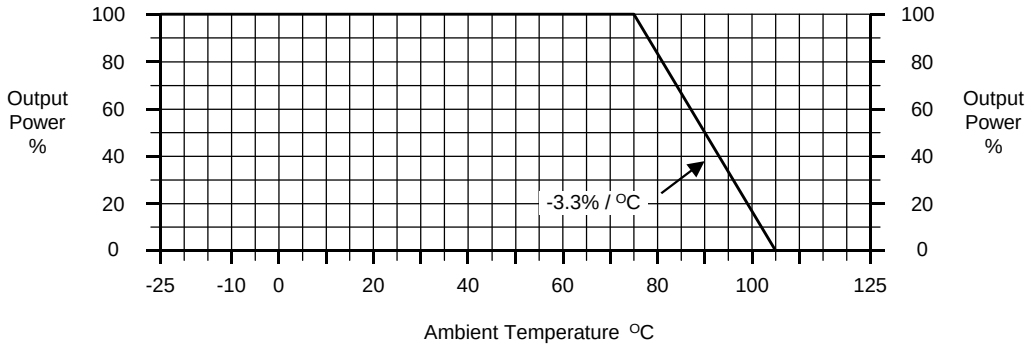
5V Input Models	12V Input Models	24V Input Models
500mA Slow − Blow Type	200mA Slow − Blow Type	100mA Slow − Blow Type

Typical Applications

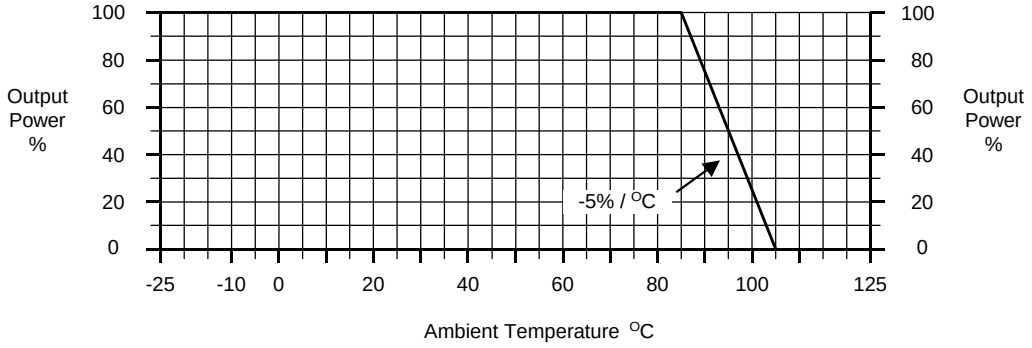


Derating Curve

3.3, 5 & { 5V Only



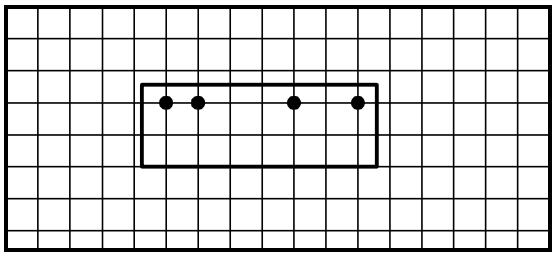
All Other Output



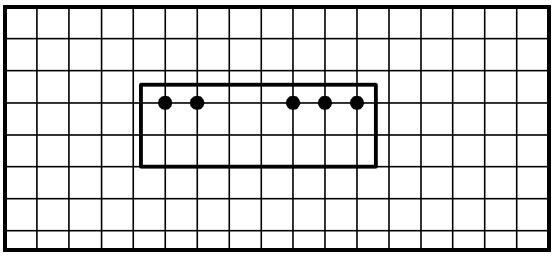
Connecting Pin Patterns

(2.54 mm / 0.1 inch grids)

Single Output



Dual Output



NOTE:

1. Specifications typical at Ta=+25] ,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.