

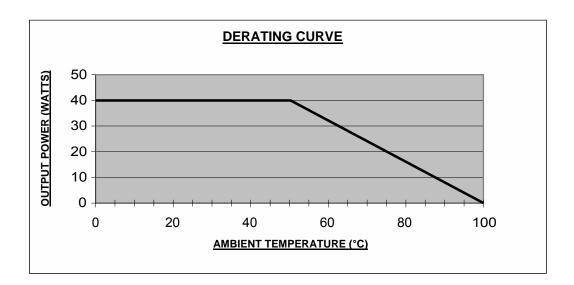
Rev. B

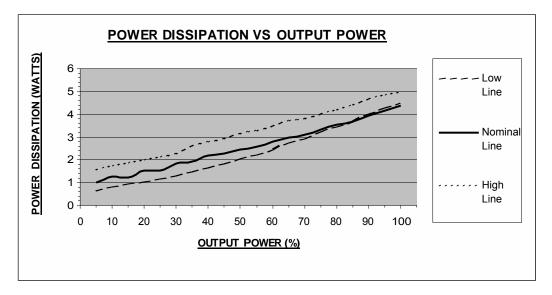
## **APPLICATION NOTES**

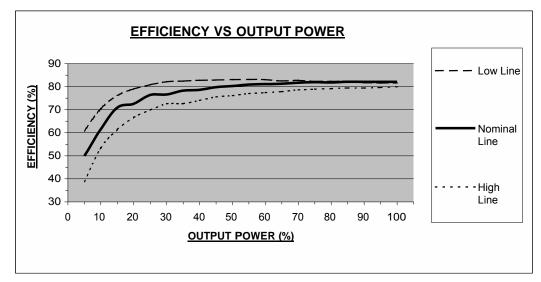
QAW48T12-40

Technical Specifications Model No.				QAW48T12-40				
All specifications are b							erwise noted.	
	eserve th				on technological		84	11
SPECIFICATION	_	Related of	conait	ion	Min	Nom	Max	Unit
	-				1	40.5	1 1	) / d a
Turn On At						16.5		Vdc
Turn Off At						15.5		Vdc
Input Over Voltage Shutdown								
Turn On At						77.5		Vdc
Turn Off At					10	76.5		Vdc
Operating Voltage Range		Rated Input Voltage			18	48	75	Vdc
Maximum Input Current		Low Line 1	100% L	oad		2.74		A
No Load Input Current						28		mA
Input Current under "LOGIC OFF"						4		mA
Inrush Current Transient Rating						1		A <sup>2</sup> Sec
Reflected Ripple Current		20MHz w/low sc	ource in	npedance		725		mA
OUTPUT								
Output Voltage Set point					4.95/±10.81	5 / ±12	5.05/±13.20	Vdc
Output Voltage Regulation								
Over Load						1 / ±5		%
Over Line						1 / ±1		%
Over Temperature						0.2 / 1		% / °C
Output Voltage Ripple and Noise								
Basic Ripple						25	100	mV
Spikes P-P						50	100	mV
Output Current Ranges					0.4 / ±0.083		4 / ±0.833	А
Output Current Limit		Rated Output Current			5.2 / ±1.083	6 / ±1.25	6.8 / ±1.417	А
Short Term Output Current Surge		Self Resetting						A/sec
DYNAMIC CHARACTERISTICS	_							
Input Voltage Ripple Rejection		120	) Hz			60		dB
Output Transient and Load Changes								
Load Step / ΔV	Х	50 to 75%		50 to 100%		55		mV
Load Step / ΔV	X	75 to 50%		100 to 50%		50		mV
Recovery Time	~		% Rate			90		μs
Turn On Delay	Fr	To within 1% Rated Vo From Vin (nom) to 90% Vout (Nom)				475		μs
Overshoot of Output Voltage		Full Load				0		μ3 %
EFFICIENCY	4	T uli Loau	Resist	ive		0	1 1	70
	1				1	00	1	0/
@ 100% load						82		%
@ 75% load						82		%
@ 50% load						80		%
@ 25% load						76		%
TEMPERATURE CONSIDERATIONS							1	
Thermal Resistance								
Normal Convection		Rθ	c-a			5.09		°C / Wat
100 lfm								
200 lfm								
300 lfm								
400 lfm								
Heatsink Considerations		Available, Co	ontact F	actory				°C / Watt
GENERAL TECHNICAL DATA								
Switching Frequency		Fixed				350		KHz
Remote ON/OFF Control		Active HIGH, Open Collector						TTL
Trimmability					4.75 / ±11.4		5.25 / ±12.6	Vdc
Over Temperature Shutdown	1	Case Temperature					105	°C
MTBF					<u> </u>			
		Bellcore	TR-32	2		3.51E6		Hours

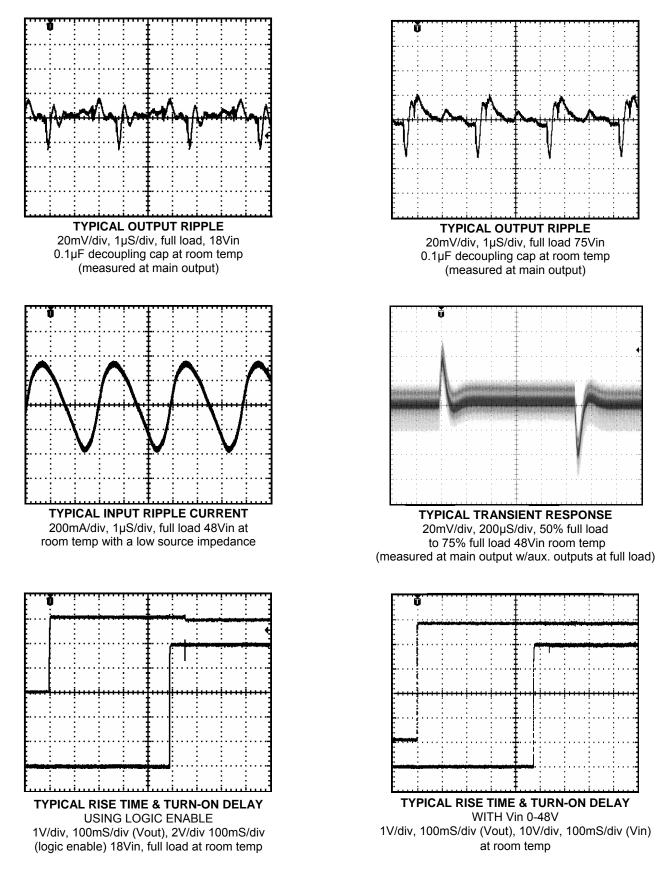










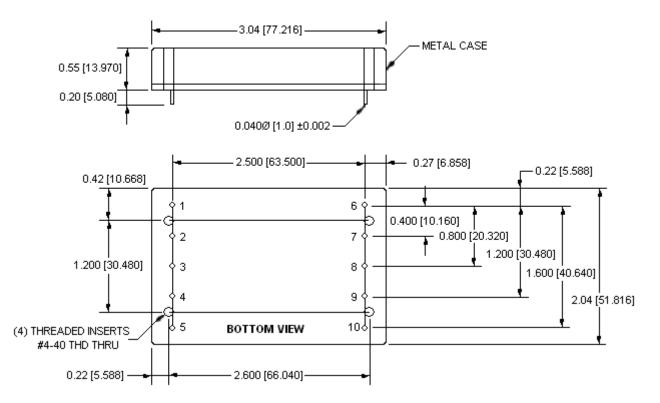


Wall Industries, Inc. 5 Watson Brook Road Exeter, NH 03833 603-778-2300 <u>www.wallindustries.com</u> Fax 603-778-9797



## **MECHANICAL DRAWING**

Unit: inches [mm]



Case and pin-to-case measurements for reference only unless otherwise noted.

PIN CONNECTION						
PIN #	SINGLE	DUAL	TRIPLE			
1	No Pin	No Pin	No Pin			
2	-Input	-Input	-Input			
3	+Input	+Input	+Input			
4	Case	Case	Case			
5	On/Off Control	On/Off Control	On/Off Control			
6	No Pin	-Vout	-12V / -15Vout			
7	No Pin	No Pin	+12V / +15Vout			
8	Common	Common	Common			
9	+Vout	+Vout	+Vout			
10	Trim	Trim	Trim			

For "A" option/suffix, Pin 2 is +Input (+Vin), Pin 3 is –Input (-Vin)



## **COMPANY INFORMATION**

Wall Industries, Inc. has created custom and modified units for over 40 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

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Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact Wall Industries for further information:

Phone:	<b>2</b> (603)778-2300
Toll Free:	<b>a</b> (888)587-9255
Fax:	<b>2</b> (603)778-9797
<u>E-mail</u> :	sales@wallindustries.com
Web:	www.wallindustries.com
Address:	5 Watson Brook Rd.
	Exeter, NH 03833