

DELPHI SERIES



FEATURES

- ♦ High efficiency: 88.5% @ 3.3V/12A & 1.2V/25A
- ♦ Size: 57.9mm×36.8mm×9.7 mm (2.28" ×1.45" ×0.38")
- ♦ Industry standard footprint and pinout
- ♦ Flexible current allocation on each output
- ♦ Low voltage output (O/P 2) starts up first
- ♦ Output 2 can be adjusted (trim)
- ♦ Fixed frequency operation
- ♦ Input UVLO, Output OCP, OVP, OTP
- ♦ No minimum load required
- ♦ 1500V Isolation and basic insulation
- ♦ ISO 9001, TL 9000, ISO 14001, QS9000, OHSAS18001 certified manufacturing facility
- ♦ UL/cUL 60950-1 (US & Canada), and TUV (EN60950-1) - pending

Delphi Series Q48DM, 75W Quarter Brick, Dual Output DC/DC Power Modules: 3.3V/12A and 1.2V/25A

The Delphi Series Q48DM Quarter Brick, 48V input, dual output, isolated DC/DC converters are the latest offering from a world leader in power system and technology and manufacturing — Delta Electronics, Inc. This product family provides up to 75 watts of dual positive regulated outputs with a flexible combination of output current and in a very cost effective industry standard footprint. Both output channels can be used independently. There is a trim function to be used with the second output voltage (the lower output voltage). With creative design technology and optimization of component placement, these converters possess outstanding electrical and thermal performance, as well as extremely high reliability under highly stressful operating conditions. All models are fully protected from abnormal input/output voltage, current, and temperature conditions. The Delphi Series Q48DM converters meet all safety requirements with basic insulation.

OPTIONS

- ♦ Positive On/Off logic
- ♦ Heatsink available for extended operation

APPLICATIONS

- ♦ Telecom / DataCom
- ♦ Wireless networks
- ♦ Optical network equipment
- ♦ Server and data storage
- ♦ Industrial / Test Equipment

SPECIFICATIONS

GENERAL SPECIFICATIONS			OUTPUT SPECIFICATIONS		
Input Voltage		36~75V	Voltage Accuracy	Typical	±1.5%
Switching Frequency	Typical (3.3V)	350KHz	Line Regulation	Typical	±0.5%
Isolation Voltage	In/Out	1500V	Load Regulation	Typical	±1.5%
Isolation Capacitance	Typical	1500 pF	Ripple & Noise	Typical	50 mV
Isolation Resistance	Minimum	10M Ohms	Current Limits	Typical	140%
MTBF	Bellcore (3.3V)	TBD	Over Voltage	Typical	135%
Size	(2.28" x1.45" x0.38")	57.9 x 36.8 x 9.7 mm	Voltage Trim	For Vout2	±10%

PART NUMBERING SYSTEM

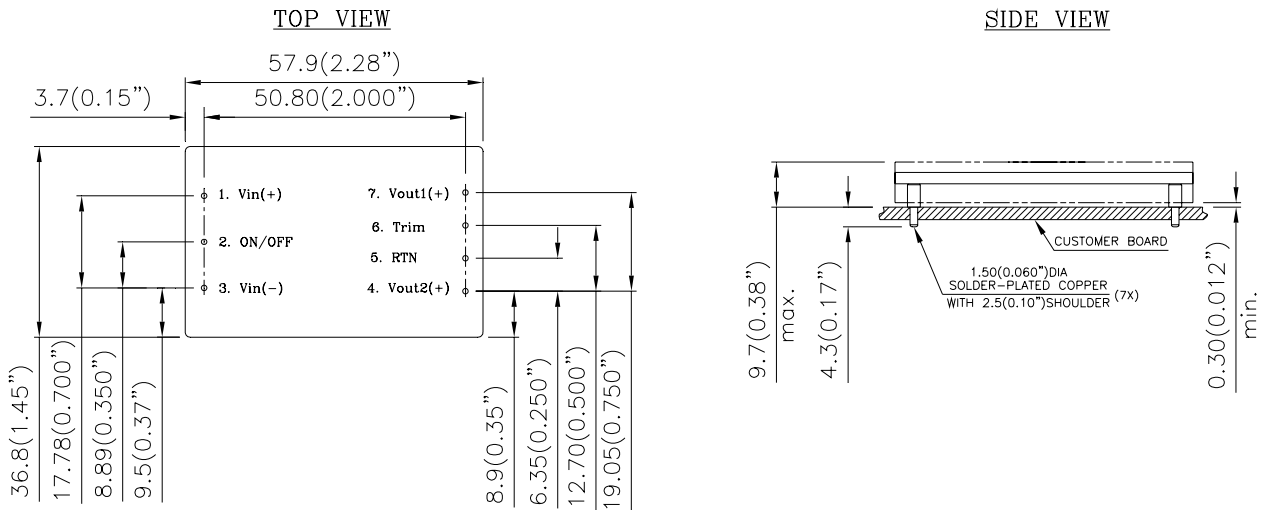
Q	48	D	M	3R3	12	N	N	F	A
Product Type	Input Voltage	Number of Outputs	Product Series	Output Voltage 1	Output Voltage 2	ON/OFF Logic	Pin Length		Option Code
Q - Quarter Brick	48V	D - Dual Output	M - 75W Platform	3R3 - 3.3V	12 - 1.2V	N - Negative P - Positive	N - 0.150" R - 0.170"	F - RoHS 6/6 (Lead Free)	A - Standard Functions

MODEL LIST

MODEL NAME	INPUT		OUTPUT *		EFF @ Full Load
Q48DM3R312NN A	36V~75V	2.4A	3.3V/12A	1.2V/25A	88.5%

* Note: Total output power should not exceed 75 watts and maximum output current for high output is 12A, for low output is 25A.

MECHANICAL DRAWING



NOTES:

DIMENSIONS ARE IN MILLIMETERS AND (INCHES)
 TOLERANCES: X.Xmm±0.5mm(X.XX in.±0.02 in.)
 X.XXmm±0.25mm(X.XXX in.±0.010 in.)

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WARRANTY

Delta offers a two (2) year limited warranty. Complete warranty information is listed on our web site or is available upon request from Delta.

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