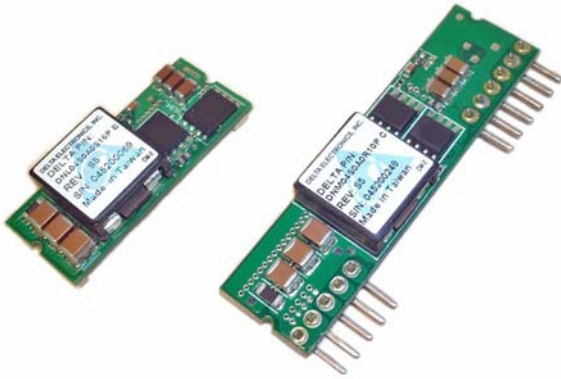


DELPHI SERIES



FEATURES

- ♦ High efficiency:
 - 95% @ 5.0V_{in}, 3.3V/16A out
 - 96% @ 5.0V_{in}, 3.3V/10A out
- ♦ Small size and low profile:
 - 1.30" x 0.53" x 0.35" (SMD)
 - 2.00" x 0.53" x 0.33" (SIP)
- ♦ Standard footprint
- ♦ Voltage and resistor-based trim
- ♦ Pre-bias startup
- ♦ Output voltage tracking
- ♦ No minimum load required
- ♦ Output voltage programmable from 0.75V_{dc} to 3.3V_{dc} via external resistors
- ♦ Fixed frequency operation
- ♦ Input UVLO, Output OTP, OCP
- ♦ Remote sense and remote ON/OFF
- ♦ ISO 9001, TL 9000, ISO 14001, QS9000, OHSAS18001 certified manufacturing facility
- ♦ UL/cUL 60950 (US & Canada) Recognized, and TUV (EN60950) Certified
- ♦ CE mark meets 73/23/EEC and 93/68/EEC directives

Delphi Series DNM/DNL, Non-Isolated, Point of Load DC/DC Power Modules: 2.8-5.5V_{in}, 0.75-3.3V/10A/16A out

The Delphi Series DNM/DNL, 2.8-5.5V input, single output, non-isolated point of load DC/DC converters are the latest offering from a world leader in power systems technology and manufacturing -- Delta Electronics, Inc. This family of product provides a programmable output voltage from 0.75V to 3.3V using external resistors. The DNM/DNL product family also has a flexible, programmable tracking and sequencing feature, which provides a variety of startup voltages as well as sequencing and tracking between power modules. These converters are available in a surface mount or SIP package and offer up to 10A (DNM) or 16A (DNL) of current in an industry standard footprint. 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 possess a myriad of standard protection features.

OPTIONS

- ♦ Negative On/Off logic
- ♦ Tracking feature
- ♦ Surface mount and SIP packages

APPLICATIONS

- ♦ Telecom / DataCom
- ♦ Distributed power architectures
- ♦ Servers and workstations
- ♦ LAN / WAN applications
- ♦ Data processing applications

SPECIFICATIONS

GENERAL SPECIFICATIONS			OUTPUT SPECIFICATIONS		
Input Voltage	Typical	2.8V ~ 5.5V	Voltage Adjustment	Typical	0.75V ~ 3.3V
Switching Frequency	Typical	300KHz	Line Regulation	Typical	0.3%
Turn-on time	Typical	8 mS	Load Regulation	Typical	0.4%
OTP	Typical	125°C	Ripple & Noise	Typical	25 mV
Size	Typical	1.30" x 0.53" x 0.35" (SMD) 2.00" x 0.53" x 0.33" (SIP)	Current Limits	Typical	220%

PART NUMBERING SYSTEM

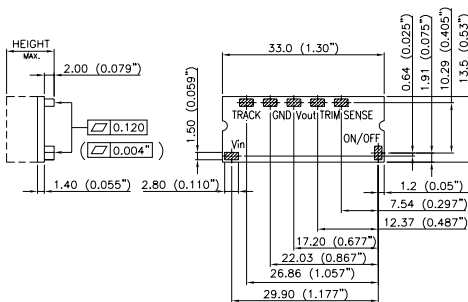
DNL	04	S	0A0	S	16	P	F	D
Product Family	Input Voltage	Number of Outputs	Output Voltage	Package Type	Output Current	On/Off Logic		Option Code
DNM - 10A DNL - 16A	04 - 2.8V ~ 5.5V 10 - 8.3V ~ 14V	S - Single	0A0 - Programmable	R - SIP S - SMD	10 - 10A 16 - 16A	N - Negative P - Positive	F- RoHS 6/6 (Lead Free)	D - Standard Function

MODEL LIST

Model Name	Packaging	Input Voltage	Output Voltage	Output Current	Efficiency 5.0Vin, 3.3Vout @ full load
DNM04S0A0S10PFD	SMD	2.8V ~ 5.5Vdc	0.75V ~ 3.3Vdc	10A	96.0%
DNM04S0A0R10PFD	SIP	2.8V ~ 5.5Vdc	0.75V ~ 3.3Vdc	10A	96.0%
DNL04S0A0S16PFD	SMD	2.8V ~ 5.5Vdc	0.75V ~ 3.3Vdc	16A	95.0%
DNL04S0A0R16PFD	SIP	2.8V ~ 5.5Vdc	0.75V ~ 3.3Vdc	16A	95.0%

MECHANICAL DRAWING

SMD PACKAGE

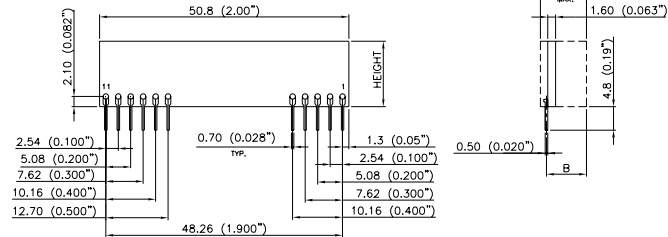


	HEIGHT
04S	8.8 (0.35")
10S	9.7 (0.38")

SIDE VIEW

BOTTOM VIEW

SIP PACKAGE



PIN#	Function	PIN#	Function	PIN#	Function
1	Vo	5	GND	9	TRACK
2	Vo	6	GND	10	TRIM
3	Vo SENSE	7	Vi	11	ON/OFF
4	Vo	8	Vi		

	A	B	HEIGHT
04S	8.5 (0.33")	7.15 (0.281")	13.4(0.53")
10S	9.5 (0.37")	8.15 (0.320")	12.7(0.50")

SIDE VIEW

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

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