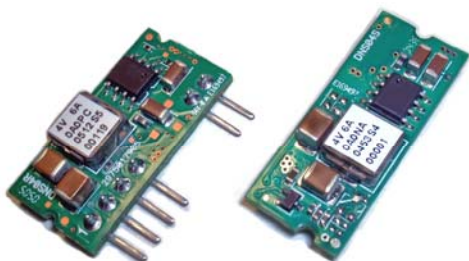


# DELPHI SERIES



## FEATURES

- ♦ High Efficiency:  
89.5% @ 12Vin, 3.3V/6A out
- ♦ Small size and low profile:  
1.10" x 0.45" x 0.29" (SMD)  
1.00" x 0.50" x 0.26" (SIP)
- ♦ Standard footprint
- ♦ Voltage and resistor-based trim
- ♦ Pre-bias startup
- ♦ Voltage tracking
- ♦ No minimum load required
- ♦ Output voltage programmable from 0.75Vdc to 5.0Vdc via external resistors
- ♦ Fixed frequency operation
- ♦ Input UVLO, Output OTP, OCP
- ♦ Remote ON/OFF
- ♦ ISO 9001, TL 9000, ISO 14001, QS9000, OHSAS18001 certified manufacturing facility
- ♦ UL/cUL 60950-1 (US & Canada) Recognized, and TUV (EN60950-1) Certified
- ♦ CE mark meets 73/23/EEC and 93/68/EEC directives

## Delphi series DNS10, Non-Isolated Point of Load DC/DC Power Modules: 8.3-14Vin, 0.75V-5.0Vout, 6A out

The Delphi series DNS10, 8.3V~14V 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. The DNS series provides a programmable output voltage from 0.75V to 5.0V using an external resistor. The DNS converters have flexible and programmable tracking and sequencing features to enable a variety of startup voltages as well as sequencing and tracking between power modules. This product family is available in a surface mount or SIP package and provides up to 6A of current in an industry standard footprint. With creative design technology and optimization of component placement, these converters possess outstanding electrical and thermal performance and extremely high reliability under highly stressful operating conditions.

## 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	12V (8.3V ~ 14.0V)	Voltage Adjustment	Typical	0.75V ~ 5.0V
Switching Frequency	Typical	300KHz	Line Regulation	Typical	0.3%
Turn-on time	Typical	7 mS	Load Regulation	Typical	0.4%
OTP	Typical	120°C	Ripple & Noise	Typical	30 mV
Size	Typical	1.10" x 0.45" x 0.29" (SMD) 1.00" x 0.50" x 0.26" (SIP)	Current Limits	Typical	200%

## PART NUMBERING SYSTEM

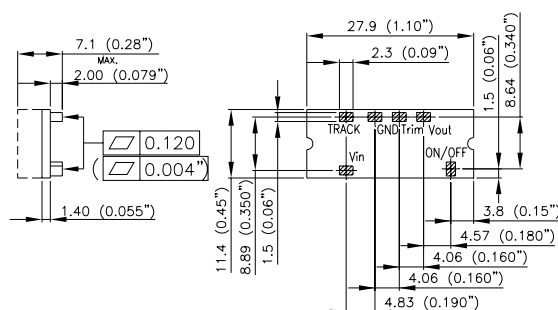
DNS	10	S	0A0	S	06	P	F	D
Product Family	Input Voltage	Number of Outputs	Output Voltage	Package Type	Output Current	On/Off Logic		Option Code
DNS – 6A DNM – 10A DNL – 16A	04 - 2.8V~5.5V 10 – 8.3V~ 14V 12 - 10V~14V	S - Single	0A0 - Programmable	R - SIP S - SMD	06 - 6A	N - Negative P - Positive	F- RoHS 6/6 (Lead Free)	D- Standard functions

## MODEL LIST

Model Name	Package	Input Voltage	Output Voltage	Output Current	On/Off Logic	Efficiency 12Vin, 3.3Vout @ full load
DNS10S0A0S06PFD	SMD	8.3V ~ 14Vdc	0.75V ~ 5.0Vdc	6A	Positive	89.5%
DNS10S0A0S06NFD	SMD	8.3V ~ 14Vdc	0.75V ~ 5.0Vdc	6A	Negative	89.5%
DNS10S0A0R06PFD	SIP	8.3V ~ 14Vdc	0.75V ~ 5.0Vdc	6A	Positive	89.5%
DNS10S0A0R06NFD	SIP	8.3V ~ 14Vdc	0.75V ~ 5.0Vdc	6A	Negative	89.5%

## MECHANICAL DRAWING

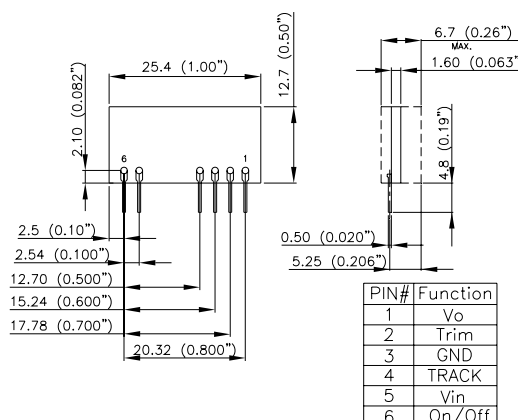
### SMD PACKAGE



SIDE VIEW

BOTTOM VIEW

### SIP PACKAGE



BACK VIEW

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.)

## CONTACT: [www.delta.com.tw/dcdc](http://www.delta.com.tw/dcdc)

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## WARRANTY

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