

# DC-DC Converters

## DLS-1203DC Series

12 to 03V DC Power Supply



- *High efficiency*
- *High precision*
- *Heavy duty applications*

# DLS-1203DC Series DC-DC Converter Datasheet

## 10-16 VDC Input and 3 VDC output



### Applications:

- Automotive
- Telecommunications
- Distributed power
- Defense
- Aerospace
- Medical
- And other applications requiring high efficiency

### General Description:

Nelso™ is manufacturer of high precision, high reliability DC-DC Converter in Kolkata, India. This product is designed to provide 12V to 3V power conversion for heavy duty applications.

### Features:

- Input-output isolation
- High efficiency
- High precision
- Wide input voltage range
- Over-voltage protection
- Under voltage protection
- Reverse polarity protection
- Voltage transient protection
- Over load protection
- Short circuit protection

### Quick Reference Data:

| Model No.  | Input Voltage | Output Voltage | Output Current               | Efficiency | Ripple |
|------------|---------------|----------------|------------------------------|------------|--------|
| DLS-1203DC | 12V DC        | 3V DC          | 3A<br>5A<br>8A<br>10A<br>12A | 85%        | <150mV |

### Electrical Specification:

|                                     |  |
|-------------------------------------|--|
| Input Voltage:                      | 10V DC to 16V DC                       |
| Output Voltage:                     | 3V DC (Regulated)                      |
| Output Current:                     | 1, 3, 5, 8, 10, 12 A                   |
| Reverse Polarity:                   | 30V DC                                 |
| Line Regulation:                    | ±1%                                    |
| Load Regulation:                    | ± 5% at terminal block                 |
| Switching Frequency:                | 80 KHz                                 |
| Efficiency:                         | 80% Typical                            |
| Topology:                           | Transformer isolated forward converter |
| Operating Temperature:              | -40 to 80 °C                           |
| Humidity:                           | Up to 95% RH                           |
| Heat Sink Temperature:              | 100°C                                  |
| Storage Temperature Range:          | - 55°C to + 105°C                      |
| Weight:                             | 475gm                                  |
| Dimension (Height x width x depth): | 128 x 85 x 63 mm                       |