

# ECONOLINE - DC/DC-Converter

RSD-xxxxDH Series, 1 Watt, 3kVDC Isolation, SMD (Dual Output)



# RECOM

## Selection Guide

| Part Number SMD | Input Voltage (VDC)        | Output Voltage (VDC) | Output Current (mA) | Efficiency (%) |
|-----------------|----------------------------|----------------------|---------------------|----------------|
| RSD-XX1.8DH     | 1.8, 3.3, 5, 9, 12, 15, 24 | ±1.8                 | ±278                | 70             |
| RSD-XX3.3DH     | 1.8, 3.3, 5, 9, 12, 15, 24 | ±3.3                 | ±152                | 70             |
| RSD-XX05DH      | 1.8, 3.3, 5, 9, 12, 15, 24 | ±5                   | ±100                | 70             |
| RSD-XX09DH      | 1.8, 3.3, 5, 9, 12, 15, 24 | ±9                   | ±56                 | 78             |
| RSD-XX12DH      | 1.8, 3.3, 5, 9, 12, 15, 24 | ±12                  | ±42                 | 80             |
| RSD-XX15DH      | 1.8, 3.3, 5, 9, 12, 15, 24 | ±15                  | ±33                 | 82             |
| RSD-XX24DH      | 1.8, 3.3, 5, 9, 12, 15, 24 | ±24                  | ±21                 | 82             |

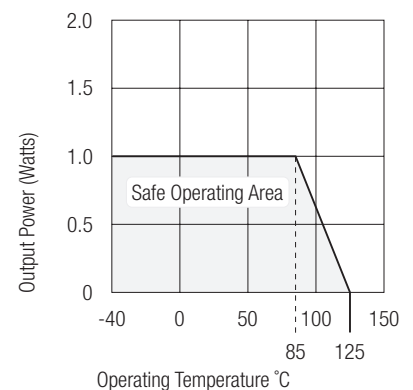


## Features

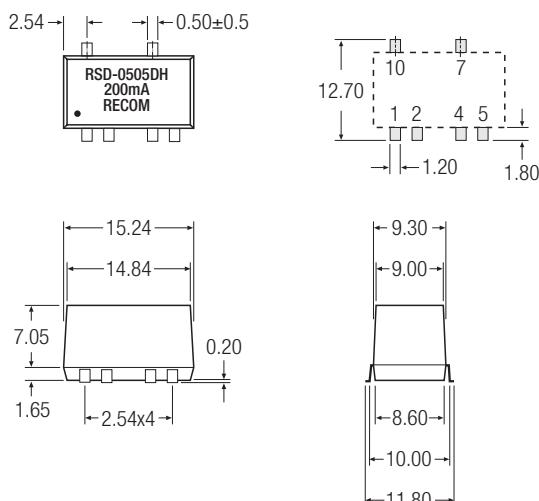
- 3kVDC Isolation
- Efficiency to 70%
- UL 94V-0 Package Material
- Toroidal Magnetics
- Internal SMD Construction

## Specifications (Core Operating Area) and Operating Temperature / Derating-Graph

|   |   |                                  |
|---|---|----------------------------------|
| Input Voltage   | ±10%  |                                  |
| Output Voltage (at $V_{in} = 5VDC$ , $I_o = \text{full load}$ ) | ±5%   |                                  |
| Line Voltage Regulation   | 1,2% typ./1% of $V_{in}$  |                                  |
| Load Voltage Regulation (10% to 100% full load)                 | 1.8V, 3.3V output types<br>5V output type<br>9V, 12V, 15V, 24V output types | 20% max.<br>15% max.<br>10% max. |
| Ripple and Noise (20MHz BW)                                     | ±100mVp-p max.  |                                  |
| Efficiency at Full Load   | 70% min.  |                                  |
| Operating Frequency   | 50kHz min.  |                                  |
| Isolation Voltage   | 3.000VDC min.   |                                  |
| Short Circuit Protection  | 1 Second  |                                  |
| Operating Temperature   | -40°C to +85°C* (see Graph)   |                                  |
| Storage Temperature   | -55°C to +125°  |                                  |



## Package Style and Pinning (mm)



### Pin Connections

| Pin # | Dual  |
|-------|-------|
| 1     | -Vin  |
| 2     | +Vin  |
| 4     | Com   |
| 5     | -Vout |
| 7     | +Vout |
| 10    | NC    |

NC = No Connection

XX.X ± 0.5 mm  
XX.XX ± 0.25 mm