International Coil, Inc.  ICI68DW10 SERIES

Wide Input Voltage Range 10 Watt DC-DC Converter

FEATURES:
- 10W DIL PACKAGE
- 4:1 WIDE INPUT RANGE
- 100% BURNED IN
- HIGH EFFICIENCY
- UL94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- 3 YEARS WARRANTY
- Remote Control: On/Off

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Input Voltage</th>
<th>Input Current</th>
<th>Output Voltage</th>
<th>Output Current</th>
<th>Efficiency</th>
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<tr>
<td></td>
<td>Vdc</td>
<td>No-Load (mA TYP)</td>
<td>Full Load (mA TYP)</td>
<td>Vdc</td>
<td>Full Load (mA)</td>
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</tr>
</tbody>
</table>

Input Specifications

Parameters | Conditions | Min | Typ | Max | Units
---|---|---|---|---|---
Voltage Types | 4:1 |
Filter | Pi Network |
Protection | Fuse Recommended |

Output Specifications

Parameters | Conditions | Min | Typ | Max | Units
---|---|---|---|---|---
Voltage Tolerance | Single/Dual |
Short Circuit/Restart | Continuous/Automatic |
Over Load Protection | 150 |
Line Regulation | High Line to Low Line |
Load Regulation | Single & Dual (F.L-25%,F.L) |
Minimum Load | 10% of Full Load |
Ripple & Noise | BW=DC To 20MHz (with 1uF Cap.) |
| Transient response setting time | current change from 25% to 100% |

General Specifications

Parameters | Conditions | Min | Typ | Max | Units
---|---|---|---|---|---
Isolation Resistance | 500Vdc |
Switching Frequency | 400 KHz |
Operating Temperature | -40 | 85 °C |
Humidity | Non Condensing |
Cooling | Free air Convection |
Case material | Five-Side Shielded Case |
Weight | 17.5 g |
Dimensions | Appearance size |
Potting Material | Epoxy (UL94V-0 rated) |
Radiated Emissions | EN55022 CLASS A |
Conducted Emissions | EN55022 CLASS A |
Efficiency | 80 % |
Isolation Voltage | For 10 seconds |
MTBF | MIL-HDBK-217F @25°C, Ground Benign |
Storage Temperature | -55 | +125 °C |
Case Temperature | +95 °C |

http://www.acutepower.com e-mail: sales@internationalcoil.com P:508-580-8515x1 F:508-580-8511
International Coil, Inc.  ICI

68DW10 SERIES

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Temperature Derating Graph  Tolerance Envelope Graph

Case Surface Temperature(℃)  Output Current(%)
-40  75  85
+100  75  85  90  95  100

Nature Convection

Output Power(%)  Output Voltage(%)
0  25  50  75  100
0  20  40  60  80  100

-40

Output Power(%)  Output Voltage(%)
0  25  50  75  100
0  20  40  60  80  100

-40

Recommended Test Circuit

Input filter components (C1, C2, L) are used to help meet conducted emissions (EN55022 class A) requirement for the module. These components should be mounted as close as possible to the module; and all leads should be minimized to decrease radiated noise.

Markings and dimensions

UNIT:mm  XX.X±0.5  XX.XX±0.25
Pin Size Tolerance: 0.6Φ ±0.05mm

PIN Connection

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