

1.5-25W, Ultra Compact Single and Dual DC-DC Converters

Features

- ◆ Compact Footprint / Low Profile
- ◆ Through Hole or SMT Versions
- ◆ 5V, 12V, 24V & 48V Inputs
- ◆ 3.3 to 30V¹ Single, ±12 to 15V Dual Outputs
- ◆ Output Voltage Adjustment
- ◆ Input - Output Isolation
- ◆ RoHS Compliant
- ◆ 5 Year Warranty
- ◆ Self contained
- ◆ Multiple Input Voltage configurations
- ◆ Open frame (no potting)



Key Market Segments & Applications



| Specifications | | | | | |
|---|------------------|--|---------------|----------|-----------------------------|
| Model | | | | | |
| Nominal Output Voltage | V | 3.3V | 5V | 12/15V | ±12/15 (24/30) ¹ |
| DC Input | V | 5V: 4.5-9.0V, 12V: 9-18V, 24V: 18-36V, 48V: 36-76V | | | |
| Efficiency | % | 71 to 90% model dependant | | | |
| Output Voltage Tolerance | % | 1.5-10W: ±3%, 15-25W: ±5% | | | ±5% |
| Output Adjustment (via trim pin) | V | 3.15-3.6V (5) | 4.75-6.0V (5) | 11.4-15V | 22.8 - 30V |
| Line Regulation | mV | 20 (40 CC15; 30 CC25) | | 40 | 80 |
| Load Regulation | mV | 40 (120 CC15; 200 CC25) | | 100 | 600 ² |
| Temperature Coefficient | % | <± 0.02%/°C | | | |
| Preload | - | No preload required | | | |
| Output Ripple (typ./max.BW 50MHz) | mV | 40/120 | | 30/120 | |
| Overcurrent Protection | - | Output current limiting with automatic recovery, shutdown CC15, 25 type | | | |
| Overvoltage Protection | - | No | | | |
| Remote On/ Off | - | CC1R5, 3, 6, & 10: RC terminal open, output is OFF; RC terminal to -Vin (0-0.4V), output is ON CC15 & CC25: RC terminal open, output is ON; RC terminal to +Vin, output is OFF | | | |
| Operating Temp.- Convection | °C | -40 to 85°C, derates linearly to 40% load from 50°C to 85°C | | | |
| Operating Temp.- Forced Air | °C | -40°C to 85°C with 1m/s air full load | | | |
| Storage Temperature | °C | -40°C to 85°C | | | |
| Humidity (non Condensing) | - | 95% RH max.(maximum wet-bulb temperature: 38°C) | | | |
| Isolation Voltage | - | 500VAC 1 min. Input to output, input to case, output to case | | | |
| Isolation Resistance | - | Input to output, input to case, output to case: 50M ohm min. (500VDC) | | | |
| Shock | m/s ² | 980m/s ² (100G) 6ms (6 directions, each 3 times) | | | |
| Vibration (non Operating) | - | 10 to 55Hz (sweep for 15min) 1.52mm constant, 3 directions X, Y, Z each 2 hours | | | |
| Safety Agency Approvals | - | UL60950-1, CSA60950-1, EN60950-1, CE Mark | | | |
| Weight | g | CC1R5: 3.2, CC3: 4.5, CC6: 5.8, CC10:10.0, CC15: 12.5, CC25: 20.0 | | | |
| Size (L x W x H) (DIP Through Hole and SMD package) (SIP Through Hole only) | in | CC1R5: 0.650 x 0.654 x 0.335; CC3: 0.900 x 0.654 x 0.335; CC6: 0.900 x 0.831 x 0.335 CC10: 1.400 x 0.890 x 0.335; CC15: 1.500 x 1.264 x 0.295; CC25: 1.701 x 1.768 x 0.295 CC3 (SIP): 1.09 x 0.362 x 0.705 | | | |
| Warranty | yrs | 5 years | | | |

1. For 24V/30V output - connect across +Vout & -Vout and leave "common out" pin not connected
2. Based upon equal load current from both outputs
3. For 15V output connect trim to -Vout
4. See Installation Manual for full specs, test methods of parameters & application notes
5. Not available on CC15 and CC25 models

