



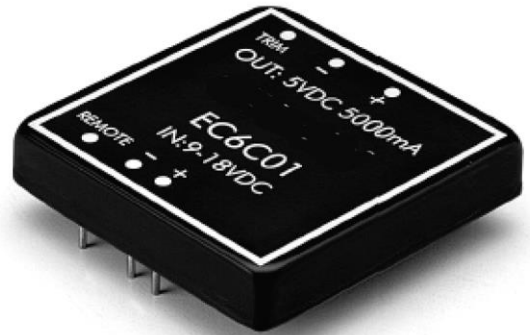
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25-30W Module DC to Dc power supply > EC6C



FEATURES

- * 25-30W Isolated Output
- * 2" X 2" Six-Sided Shield Metal Case
- * 2:1 Input Range
- * Regulated Outputs
- * Efficiency to 88%
- * Remote On/Off Control
- * UL60950-1 Approval
- * Safety Meets IEC/EN/UL 62368-1



| MODEL NUMBER | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | | INPUT CURRENT | | % EFF. | CAPACITOR LOAD MAX. |
|--------------|---------------|----------------|----------------|--------------|---------------|-----------|--------|---------------------|
| | | | MIN. | MAX. | NO LOAD | FULL LOAD | | |
| EC6C01 | 9-18 VDC | 5 VDC | 0 mA | 5000 mA | 30 mA | 2675 mA | 84 | 5000uF |
| EC6C02 | 9-18 VDC | 12 VDC | 0 mA | 2500 mA | 30 mA | 3050 mA | 88 | 2500uF |
| EC6C03 | 9-18 VDC | 15 VDC | 0 mA | 2000 mA | 30 mA | 3050 mA | 88 | 2000uF |
| EC6C04 | 9-18 VDC | ±5 VDC | ±0 mA | ±2500 mA | 35 mA | 2675 mA | 83 | 2500uF |
| EC6C05 | 9-18 VDC | ±12 VDC | ±0 mA | ±1250 mA | 35 mA | 3050 mA | 88 | 1250uF |
| EC6C06 | 9-18 VDC | ±15 VDC | ±0 mA | ±1000 mA | 35 mA | 3050 mA | 87 | 1000uF |
| EC6C07 | 9-18 VDC | 5/±12 VDC | 500/±100 mA | 3500/±310 mA | 35 mA | 2640 mA | 81 | 3500/310uF |
| EC6C08 | 9-18 VDC | 5/±15 VDC | 500/±100 mA | 3500/±250 mA | 35 mA | 2640 mA | 82 | 3500/250uF |
| EC6C09 | 9-18 VDC | 3.3 VDC | 0 mA | 5000 mA | 30 mA | 1860 mA | 80 | 5000uF |
| EC6C11 | 18-36 VDC | 5 VDC | 0 mA | 5000 mA | 30 mA | 1336 mA | 83 | 5000uF |
| EC6C12 | 18-36 VDC | 12 VDC | 0 mA | 2500 mA | 30 mA | 1525 mA | 87 | 2500uF |
| EC6C13 | 18-36 VDC | 15 VDC | 0 mA | 2000 mA | 30 mA | 1525 mA | 87 | 2000uF |
| EC6C14 | 18-36 VDC | ±5 VDC | ±0 mA | ±2500 mA | 30 mA | 1336 mA | 82 | 2500uF |
| EC6C15 | 18-36 VDC | ±12 VDC | ±0 mA | ±1250 mA | 30 mA | 1470 mA | 87 | 1250uF |
| EC6C16 | 18-36 VDC | ±15 VDC | ±0 mA | ±1000 mA | 30 mA | 1470 mA | 86 | 1000uF |
| EC6C17 | 18-36 VDC | 5/±12 VDC | 500/±100 mA | 3500/±310 mA | 30 mA | 1320 mA | 82 | 3500/310uF |
| EC6C18 | 18-36 VDC | 5/±15 VDC | 500/±100 mA | 3500/±250 mA | 30 mA | 1320 mA | 82 | 3500/250uF |
| EC6C19 | 18-36 VDC | 3.3 VDC | 0 mA | 5000 mA | 30 mA | 920 mA | 79 | 5000uF |
| EC6C21 | 36-72 VDC | 5 VDC | 0 mA | 5000 mA | 20 mA | 660 mA | 83 | 5000uF |
| EC6C22 | 36-72 VDC | 12 VDC | 0 mA | 2500 mA | 20 mA | 765 mA | 87 | 2500uF |
| EC6C23 | 36-72 VDC | 15 VDC | 0 mA | 2000 mA | 20 mA | 765 mA | 87 | 2000uF |
| EC6C24 | 36-72 VDC | ±5 VDC | ±0 mA | ±2500 mA | 25 mA | 660 mA | 82 | 2500uF |
| EC6C25 | 36-72 VDC | ±12 VDC | ±0 mA | ±1250 mA | 25 mA | 735 mA | 87 | 1250uF |
| EC6C26 | 36-72 VDC | ±15 VDC | ±0 mA | ±1000 mA | 25 mA | 735 mA | 87 | 470uF |
| EC6C27 | 36-72 VDC | 5/±12 VDC | 500/±100 mA | 3500/±310 mA | 25 mA | 655 mA | 83 | 2200/220uF |
| EC6C28 | 36-72 VDC | 5/±15 VDC | 500/±100 mA | 3500/±250 mA | 25 mA | 655 mA | 82 | 1500/150uF |
| EC6C29 | 36-72 VDC | 3.3 VDC | 0 mA | 5000 mA | 20 mA | 460 mA | 79 | 5000uF |

NOTE: 1. Nominal Input Voltage 12, 24 or 48VDC



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SPECIFICATIONS

All Specifications Typical at Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

| | | |
|----------------------------------|---------|-------------|
| Input Voltage Range | 12V | 9 – 18V |
| | 24V | 18 – 36V |
| | 48V | 36 – 72V |
| Input Surge Voltage (100ms max.) | 12V | 25Vdc max. |
| | 24V | 50Vdc max. |
| | 48V | 100Vdc max. |
| Input Filter | Pi Type | |

OUTPUT SPECIFICATIONS:

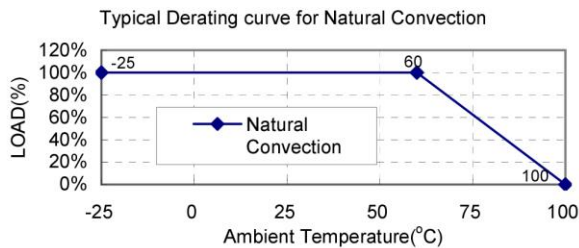
| | |
|-------------------------------------|-------------------------------|
| Voltage Accuracy | |
| Single Output | ±2.0% max. |
| Dual +Output | ±2.0% max. |
| Dual – Output | ±3.0% max. |
| Triple, 5V | ±2.0% max. |
| 12V/15V | ±5.0% max. |
| Voltage Balance (Dual) | ±1.0% max. |
| Transient Response. | |
| Single 25% Step Load Change | <500us |
| Dual FL-1/2L±1% Error Band | <500us |
| External Trim Adj. Range | ±10% |
| Ripple and Noise, 20MHz BW | 10mV RMS. max., 75mV p-p max. |
| Temperature Coefficient | ±0.02%/°C max. |
| Short Circuit Protection | Continuous |
| Line Regulation Single/Dual (note1) | ±0.5% max. |
| Triple | ±1.0% max. |
| Load Regulation Single/Dual (note2) | ±1.0% max. |
| Triple | ±5.0% max. |
| Start up Time | 900ms typ. |

GENERAL SPECIFICATIONS:

| | |
|-------------------------------------|---|
| Efficiency | See Table |
| Isolation Voltage | 500 VDC min. |
| Isolation Resistance | 10 ⁹ Ohms min. |
| Isolation Capacitance | 500pF typ. |
| Switching Frequency | 300KHz typ. |
| Case Grounding | Connected to Output Common |
| Operating Ambient Temperature Range | -25°C to +71°C |
| De-rating, Above 60°C | Linearly to Zero Power at 100°C |
| Case Temperature (note3) | 100°C max. |
| Cooling | Natural Convection |
| Storage Temperature Range | -55°C to +105°C |
| Humidity | 95% RH max. Non Condensing |
| MTBF | MIL-HDBK-217F. GB. 25°C. Full Load 900Khrs typ. |
| EMI/RFI | Six-Sided Continuous Shield |
| Dimensions | 2.00×2.00×0.40 inches (50.8×50.8×10.2 mm) |
| Case Material | Black Coated Copper with Non-Conductive Base |
| Weight | 65g |

NOTE:

1. Measured from high line to low line.
2. Measured from full load to 1/4 full load.
3. Maximum case temperature under any operating condition should not be exceeded 100°C.

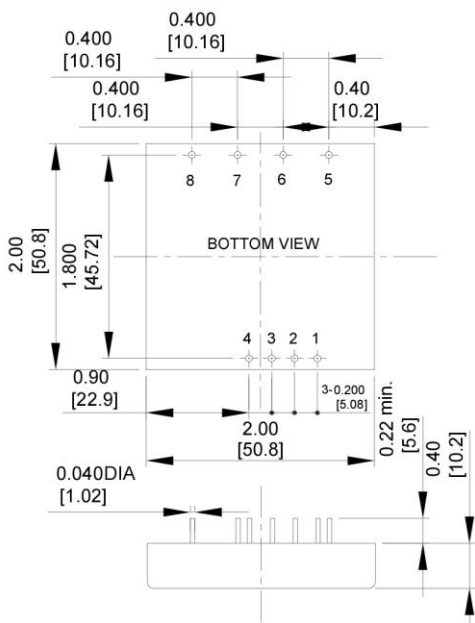


| Output (Pin No.) | Voltage | Amperes | |
|------------------|-----------|----------|------|
| | | Min. (2) | Nom. |
| 7 | +5 | 0.50 | 3.5 |
| 8 & 5 | +12 & -12 | 0.10 | 0.31 |
| 8 & 5 | +15 & -15 | 0.10 | 0.25 |

NOTE:

1. Maximum total power from all outputs is limited to 25 watts but no output should be allowed to exceed its maximum current
2. Minimum current on each output is required to maintain specified regulation

Case C Dimensions:



| Pin | Single | Dual | Triple |
|-----|-----------------------|-----------|-----------|
| 1 | Remote On/Off Control | | |
| 2 | No Pin | No Pin | No Pin |
| 3 | -V Input | -V Input | -V Input |
| 4 | +V Input | +V Input | +V Input |
| 5 | Trim | Trim | -Aux. Out |
| 6 | -V Output | -V Output | Common |
| 7 | +V Output | Common | +5Vout |
| 8 | No Pin | +V Output | +Aux. Out |

NOTE: Pin Size is 0.04±0.004 Inch (1.04±0.1 mm)DIA
 All Dimensions in Inches(mm)
 Tolerances: Inches: X.XX±0.04, X.XXX±0.010
 Millimeters: X.X±1.0, X.XX±0.25

| | |
|-----------------------|---------------------------------------|
| Logic Compatibility | CMOS or Open Collector TTL |
| Ec-On | >+5.5 VDC to 75Vdc or Open Circuit |
| Ec-Off | 0 to <1.8 VDC |
| Shutdown Idle Current | 10mA |
| Control Common | Referenced to Input Minus |

EXTERNAL OUTPUT TRIM

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.

