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MODEL: 374 270VDC
INPUT RANGE : 185-400VDC

FEATURES/BENEFITS

- **Self-contained DC-DC Converter:** Fully Functional; Needs No Additional External Capacitors or Components
- **6 Sided Metal Case:** Shields Against Radiated Emissions and Susceptibility
- **Internal Multi-mode EMI Filter:** Limits Conducted Emissions to MIL-STD-461F Requirements
- **250kHz Current Mode Flyback Topology:** Fully Regulated Output With Low Ripple and Fast Transient Response Time
- **On-Off Control Function:** Connecting On-Off Input to VinRTN Inhibits Output
- **Output Voltage Adjust Function:** User Adjustable Vout in $\pm 10\%$ Increments Via External Resistor (Single and Dual Outputs)
- **Remote Sense:** Auto Compensates Vout for Load Lead Loss (Single Outputs)
- **Soft Start Delay:** User Adjustable Vout Turn-on Ramp
- **Short Circuit Limited:** Protected Against Output Overloads and Short Circuits
- **Fully Isolated:** Inputs to Outputs and Case 500VDC, Outputs to Case 100VDC
- **Transient Tolerant:** Works Through Voltage Transients, Over and Under Voltage Limits of MIL-STD-704 270V Systems
- **Compact, Encapsulated Construction:** Small Footprint with Long Life and Reliable Operation in Severe Operational Environments
- **Two Grades Available:** Economical, Effective Tailoring to Applications Requirements

SINGLE OUTPUT

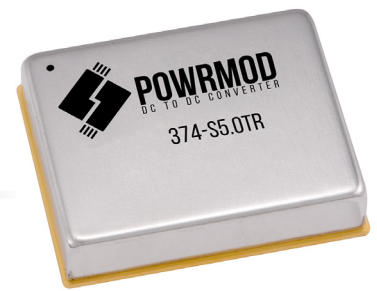
| PARAMETER | CONDITION | UNITS | OUTPUTS | | | | | | | | | | |
|-------------|----------------------|-------------|---------|------|------|------|------|------|------|------|------|------|------|
| Vout | Setpoint $\pm 2\%$ | DC Volts | 1.2 | 2.5 | 3.3 | 5.0 | 5.2 | 10 | 12 | 15 | 24 | 28 | 48 |
| Iout | Vin min-max | Amperes | 6.00 | 6.00 | 6.00 | 6.00 | 5.75 | 3.00 | 2.50 | 2.00 | 1.25 | 1.00 | 0.63 |
| Efficiency | Rated Load | Percent Min | 68 | 68 | 68 | 75 | 75 | 76 | 76 | 78 | 79 | 79 | 82 |
| Line Reg | Vin min-max | mV max | 20 | 20 | 20 | 30 | 30 | 30 | 50 | 50 | 50 | 75 | 75 |
| Load Reg | 10% to Rated Load | mV max | 30 | 30 | 30 | 50 | 50 | 50 | 75 | 75 | 120 | 120 | 150 |
| Vout Ripple | Rated Load, 20MHz BW | mVpp max | 40 | 40 | 40 | 50 | 50 | 75 | 125 | 150 | 150 | 220 | 240 |

DUAL OUTPUTS

| PARAMETER | CONDITION | UNITS | OUTPUTS | | | | | |
|-------------|----------------------|-------------|---------|------------|------------|------------|-------|------|
| Vout | Setpoint $\pm 2\%$ | DC Volts | ± 5 | ± 12 | ± 15 | ± 24 | 3.3/5 | 5/12 |
| Iout | Vin min-max | Amperes | ± 3 | ± 1.25 | ± 1.00 | ± 0.63 | 4/2 | 3/1 |
| Efficiency | Rated Load | Percent Min | 74 | 78 | 78 | 82 | 68 | 72 |
| Line Reg | Vin min-max | mV max | 40 | 50 | 75 | 75 | 50 | 75 |
| Load Reg | 10% to Rated Load | mV max | 50 | 120 | 150 | 175 | 65 | 120 |
| Vout Ripple | Rated Load, 20MHz BW | mVpp max | 100 | 150 | 220 | 240 | 100 | 150 |

TRIPLE OUTPUTS

| PARAMETER | CONDITION | UNITS | OUTPUTS | | | | | |
|-------------|----------------------|-------------|--------------|---------------|---------------|------------|---------------|---------------|
| Vout | Setpoint $\pm 2\%$ | DC Volts | 3.3/ ± 5 | 3.3/ ± 12 | 3.3/ ± 15 | 5/ ± 5 | 5/ ± 12 | 5/ ± 15 |
| Iout | Vin min-max | Amperes | 3/ ± 3 | 3/ ± 0.45 | 3/ ± 0.35 | 3/ ± 1 | 3/ ± 0.45 | 3/ ± 0.35 |
| Efficiency | Rated Load | Percent Min | 67 | 67 | 67 | 68 | 70 | 70 |
| Line Reg | Vin min-max | mV max | 50 | 50 | 50 | 75 | 75 | 75 |
| Load Reg | 10% to Rated Load | mV max | 50 | 50 | 50 | 75 | 75 | 75 |
| Vout Ripple | Rated Load, 20MHz BW | mVpp max | 40 | 40 | 40 | 50 | 50 | 50 |



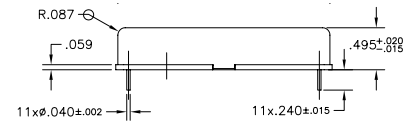
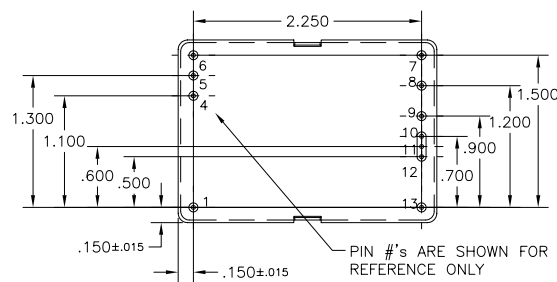
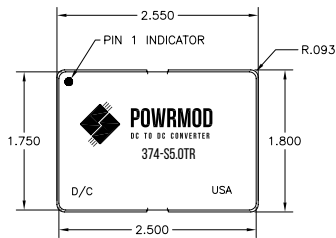
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MODEL: 374 270VDC

INPUT RANGE : 185-400VDC

MECHANICAL SPECIFICATIONS

| | |
|--------------|--|
| Size | 2.55 L x 1.80 W x .495 H inch |
| Enclosure | Full metal, CRS |
| Construction | Encapsulated sealed |
| Pins | .040 alloy |
| Weight | 65g typical |
| Mounting | Thru-Hole PWB (TH) or Chassis (CH) mount, any orientation provided baseplate is heatsunk |



PIN FUNCTIONS

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----------------------------------|----------------|----|----|------|---------|-------|------------|-------------------|------------|-------------|---------------|-----|------|
| Function for Single Outputs<10VDC | On-Off Control | NU | NU | Case | Vin Rtn | Vin + | - Rem Sns | Vout Rtn | + Vout | + Rem Sns | Vout Adj | SSD | Case |
| Function for Single Outputs>10VDC | On-Off Control | NU | NU | Case | Vin Rtn | Vin + | NC | Vout Rtn | + Vout | NC | Vout Adj | SSD | Case |
| Function for Dual Outputs | On-Off Control | NU | NU | Case | Vin Rtn | Vin + | ± Cmn Rtn | + Vout | - Vout | NC | Vout Adj | SSD | Case |
| Function for Triple Outputs | On-Off Control | NU | NU | Case | Vin Rtn | Vin + | + Sec Vout | ±Sec Vout Cmn Rtn | - Sec Vout | + Main Vout | Main Vout Rtn | SSD | Case |

DATA 25°C BASEPLATE PRODUCTS AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

PART NUMBERING CONSTRUCTION KEY

| MODEL | OUTPUT TYPE & VOLTAGE | | | ENCLOSURE | GRADE |
|-------|-----------------------|--------|---------|---------------|----------------|
| 374 | SINGLE | DUAL | TRIPLE | MOUNTING | GRADE LEVEL |
| | S1.2 S12 | D5 | T3.3/5 | T = THRU HOLE | C = COMMERCIAL |
| | S2.5 S15 | D12 | T3.3/12 | C = CHASSIS | R = RUGGED |
| | S3.3 S24 | D15 | T3.3/15 | | |
| | S5.0 S28 | D24 | T5/5 | | |
| | S5.2 S48 | D3.3/5 | T5/12 | | |
| | S10 | D5/12 | T5/15 | | |

EXAMPLE: 374-S5.0TR