

# 371

MODEL: 371 28VDC

INPUT RANGE : 16 - 80VDC

## 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 Input to VinRTN Inhibits Output
- **Output Voltage Adjust Function:** User Adjustable Vout in +/- 10% Increments Via External Resistor (Single and Dual Outputs)
- **Output Voltage Selection:** Other Output Voltages/Combinations Available; Consult Factory
- **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
- **Transients Tolerant:** Works through 80V Input Transients MIL-STD-704A
- **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									
			3.3	5.0	5.2	10	12	15	24	28	48	
Vout	Setpoint +/- 2%	DC Volts	3.3	5.0	5.2	10	12	15	24	28	48	
Iout	Vin min-max	Amperes	8.00	6.00	5.77	3.0	2.5	2.0	1.25	1.07	0.63	
Efficiency	Rated Load	Percent Min	68	72	72	76	76	78	79	79	82	
Line Reg	Vin min-max	mV max	20	30	30	30	50	50	50	75	75	
Load Reg	10% to Rated Load	mV max	30	50	50	50	75	75	120	120	150	
Vout Ripple	Rated Load, 20MHz BW	mVpp max	40	50	50	75	125	150	150	220	240	

## DUAL OUTPUTS

PARAMETER	CONDITION	UNITS	OUTPUTS					
			+/-5	+/-12	+/-15	+/-24	3.3/5	5/12
Vout	Setpoint +/- 2%	DC Volts	+/-5	+/-12	+/-15	+/-24	3.3/5	5/12
Iout	Vin min-max	Amperes	+/-3	+/-1.25	+/-1	+/-0.625	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					
			3.3/+5	3.3/+12	3.3/+15	5/+5	5/+12	5/+15
Vout	Setpoint +/- 2%	DC Volts	3.3/+5	3.3/+12	3.3/+15	5/+5	5/+12	5/+15
Iout	Vin min-max	Amperes	3/+1	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

28VDC INPUT DC-DC CONVERTERS



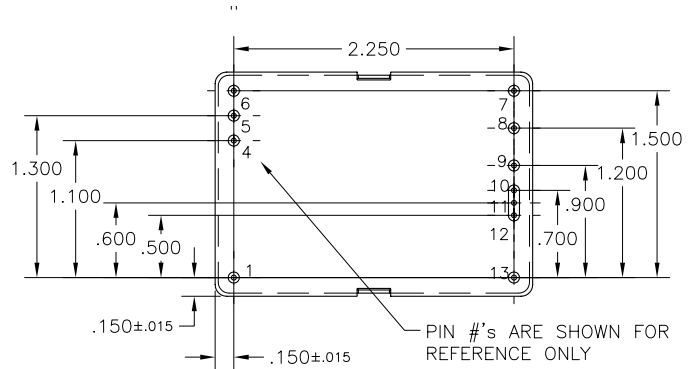
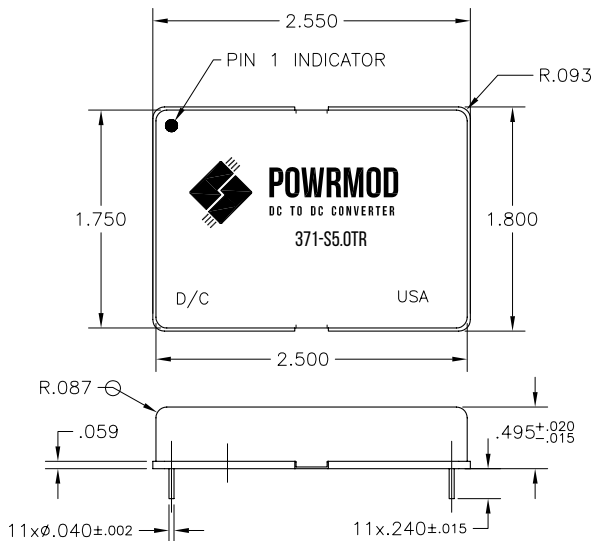
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## MECHANICAL SPECIFICATIONS

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 Snse	Vout Rtn	+ Vout	+ Rem Snse	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 +	+/- Vout Cmn Rtn	+ Vout	- Vout	NC	Vout Adj	SSD	Case
Function for Triple Outputs	On-Off Control	NU	NU	Case	Vin Rtn	Vin +	+ Sec Vout	+/- SecVout 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
371	<b>SINGLE</b> S3.3 S12 D5 T3.3/5 S5.0 S15 D12 T3.3/12 S5.2 S24 D15 T3.3/15 S10 S28 D24 T5/5 S48 D3.3/5 T5/12 D5/12 T5/15	<b>MOUNTING</b> T = THRU HOLE C = CHASSIS	<b>GRADE LEVEL</b> C = COMMERCIAL R = RUGGED

EXAMPLE: 371-S5.0TR