



20 WATT ULTRA WIDE MIL-STD-1275 INPUT DC-DC CONVERTERS OFFER FULL LOAD REGULATED POWER DURING STARTING MODE, TRANSIENT RIPPLE SPIKE EVENTS AND 461F EMI



373

MODEL: 373

INPUT RANGE : 6-125VDC

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
- **Regulates Output Over Full Input Range:** Supports Full Load During Starting Mode and Cranking Operations of MIL-STD-1275
- **Short Circuit Limited:** Protected Against Output Overloads and Short Circuits
- **Fully Isolated:** Inputs to Outputs and Case 500VDC, Outputs to Case 100VDC
- **Surges/Spikes/Ripple Tolerant:** Works Through all Input Voltage Excursions of MIL-STD-1275
- **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 +/- 2%	DC Volts	3.3	5.0	5.2	10	12	15	24	28	48	
Iout	Vin min-max	Amperes	6.06	4.00	3.85	2.00	1.67	1.34	0.85	0.70	0.40	
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	100	100	150	150	150	

DUAL OUTPUT

PARAMETER	CONDITION	UNITS	OUTPUTS			
Vout	Setpoint +/- 2%	DC Volts	+/-5	+/-12	+/-15	3.3/5
Iout	Vin min-max	Amperes	+/-2	+/-0.85	+/-0.67	3/2
Efficiency	Rated Load	Percent Min	74	78	78	72
Line Reg	Vin min-max	mV max	40	50	75	40
Load Reg	10% to Rated Load	mV max	50	120	150	50
Vout Ripple	Rated Load, 20MHz BW	mVpp max	100	150	220	100

6-125VDC DC-DC CONVERTERS



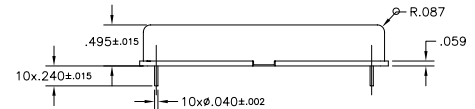
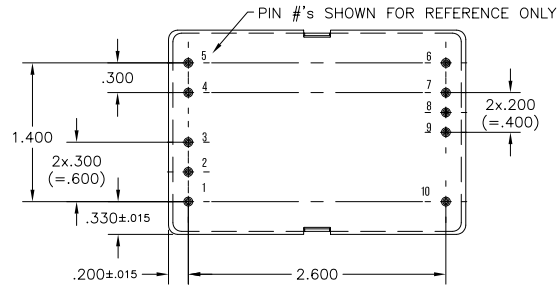
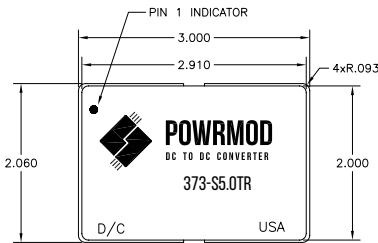
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MODEL: 373

INPUT RANGE : 6-125VDC

MECHANICAL SPECIFICATIONS

Size	3.00 L x 2.00 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
Function for Single Outputs	Case	+ Input	Vin Rtn	On-Off Control	NC	Case	NC	Vout Rtn	+ Vout	NC
Function for Dual Outputs	Case	+ Input	Vin Rtn	On-Off Control	NC	Case	-Vout	Vout Cmn Rtn	+ Vout	NC

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

PART NUMBERING CONSTRUCTION KEY

MODEL	OUTPUT TYPE & VOLTAGE	ENCLOSURE	GRADE
373	SINGLE S3.3 S24 S5.0 S28 S5.2 S48 S10 S12 S15 DUAL D5 D12 D15 D3.3/5	MOUNTING T = THRU HOLE C = CHASSIS	GRADE LEVEL C = COMMERCIAL R = RUGGED

EXAMPLE: 373-S5.0TR