



30 WATT RUGGEDIZED 110 VOLT EN50155 INPUT DC-DC CONVERTERS OFFER WIDE SELECTION OF SINGLE AND DUAL OUTPUTS AND 461F EMI PERFORMANCE



## 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 Over and Under Voltage Limits of EN50155 77 - 135 VDC Systems
- **Compact, Encapsulated Construction:** Small Footprint with Long Life and Reliable Operation in Severe Operational Environments
- **Two Grades Available:** Commercial -40°C to + 85°C and Rugged -55°C to +105°C
- **Effective Tailoring to Applications Requirements**

# 382

**MODEL: 382 110VDC**  
**INPUT RANGE : 77-135VDC**

## SINGLE OUTPUT

PARAMETER	CONDITION	UNITS	OUTPUTS								
Vout	Setpoint $\pm 2\%$	DC Volts	3.3	5.0	5.2	10	12	15	24	28	48
Iout	Vin min-max	Amperes	6.00	6.00	5.75	3.00	2.50	2.00	1.25	1.00	0.63
Efficiency	Rated Load	Percent Min	68	75	75	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						
Vout	Setpoint $\pm 2\%$	DC Volts	$\pm 5$	$\pm 12$	$\pm 15$	$\pm 24$	3.3/5	5/12	
Iout	Vin min-max	Amperes	$\pm 3$	$\pm 1.25$	$\pm 1.00$	$\pm 0.63$	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	

110VDC INPUT DC-DC CONVERTERS

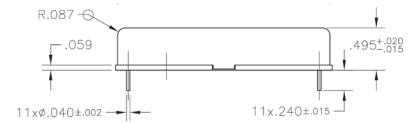
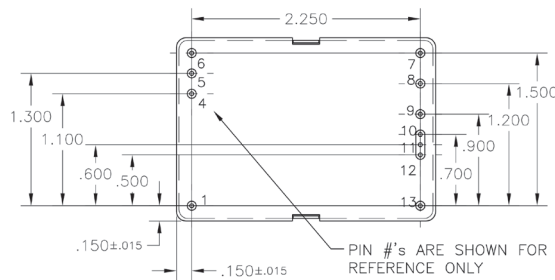
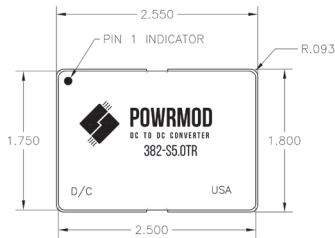


## MECHANICAL SPECIFICATIONS

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

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## 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

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

## PART NUMBERING CONSTRUCTION KEY

MODEL	OUTPUT TYPE & VOLTAGE	ENCLOSURE	GRADE																				
382	<table border="0"> <tr> <td><b>SINGLE</b></td> <td><b>DUAL</b></td> </tr> <tr> <td>S3.3 S24</td> <td>D5</td> </tr> <tr> <td>S5.0 S28</td> <td>D12</td> </tr> <tr> <td>S5.2 S48</td> <td>D15</td> </tr> <tr> <td>S10</td> <td>D24</td> </tr> <tr> <td>S12</td> <td>D3.3/5</td> </tr> <tr> <td>S15</td> <td>D5/12</td> </tr> </table>	<b>SINGLE</b>	<b>DUAL</b>	S3.3 S24	D5	S5.0 S28	D12	S5.2 S48	D15	S10	D24	S12	D3.3/5	S15	D5/12	<table border="0"> <tr> <td><b>MOUNTING</b></td> </tr> <tr> <td>T = THRU HOLE</td> </tr> <tr> <td>C = CHASSIS</td> </tr> </table>	<b>MOUNTING</b>	T = THRU HOLE	C = CHASSIS	<table border="0"> <tr> <td><b>GRADE LEVEL</b></td> </tr> <tr> <td>C = COMMERCIAL</td> </tr> <tr> <td>R = RUGGED</td> </tr> </table>	<b>GRADE LEVEL</b>	C = COMMERCIAL	R = RUGGED
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EXAMPLE: 382-S5.0TR