



10 WATT RUGGEDIZED DC-DC CONVERTERS FOR 110V RAILROAD/RAILWAY APPLICATIONS OFFER UNPARALLELED VARIETY IN OUTPUT VOLTAGE SELECTION 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
- **200kHz Current Mode Flyback Topology:** Fully Regulated Output With Low Ripple and Fast Transient Response Time
- **On-Off Control Function:** Simple Logic Level Input Inhibits Output
- **Output Voltage Adjust Function:** User Adjustable Vout in +/- 10% Increments via External Resistor
- **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 77 - 135VDC input range of EN50155 110VDC 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**

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**MODEL: 383 110VDC
INPUT RANGE : 77-135VDC**

SINGLE OUTPUT

PARAMETER	CONDITION	UNITS	OUTPUTS			
Vout	Setpoint ±2%	DC Volts	3.3	5.0	5.2	7.5
Iout	Vin min-max	Amperes	3.03	2.00	1.92	1.33
Efficiency	Rated Load	Percent Min	70	72	72	74
Line Reg	Vin min-max	mV max	20	30	30	30
Load Reg	10% to Rated Load	mV max	30	50	50	50
Vout Ripple	Rated Load, 20MHz BW	mVpp max	40	50	50	75

SINGLE OUTPUT CONTINUED

PARAMETER	CONDITION	UNITS	OUTPUTS CONTINUED					
Vout	Setpoint ±2%	DC Volts	10	12	15	24	28	48
Iout	Vin min-max	Amperes	1.00	0.83	0.67	0.42	0.36	0.21
Efficiency	Rated Load	Percent Min	76	76	78	79	79	82
Line Reg	Vin min-max	mV max	30	50	50	50	75	75
Load Reg	10% to Rated Load	mV max	50	75	75	120	120	150
Vout Ripple	Rated Load, 20MHz BW	mVpp max	75	100	100	150	150	150

110VDC INPUT DC-DC CONVERTERS



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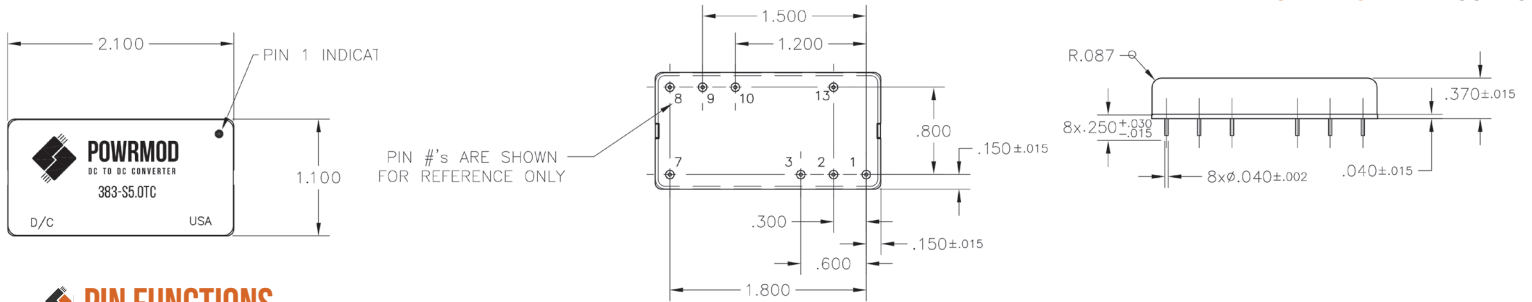


MECHANICAL SPECIFICATIONS

Size	2.07L x 1.07 W x 0.37 H inch
Enclosure	Full Metal CRS
Construction	Encapsulated sealed
Pins	.040 alloy
Weight	65g typical
Mounting	Thru-Hole PWB (TH) 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	Vin+	Vin Rtn	On-Off Control	NU	NU	NU	NC	Vout Rtn	+ Vout	Vout Adj	NU	NU	Case

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

PART NUMBERING CONSTRUCTION KEY

MODEL

383

OUTPUT TYPE & VOLTAGE

SINGLE

S3.3 S15
S5.0 S24
S5.2 S28
S7.5 S48
S10
S12

ENCLOSURE

MOUNTING
T = THRU HOLE

GRADE

GRADE LEVEL
C = COMMERCIAL
R = RUGGED

EXAMPLE: 383-S5.0TC