



20 WATT TRIPLE OUTPUT DC-DC CONVERTERS SUIT NEW AVIONICS DESIGN AND MRO APPLICATIONS IN COMMERCIAL AVIATION/AIRLINER MARKETS



## FEATURES/BENEFITS

- **Self-contained DC-DC Converter:** Fully Functional; Needs No Additional External Capacitors or Components
- **Metal Case:** Shields Against Radiated Emissions and Susceptibility
- **Internal Common Mode EMI Filter:** Limits Conducted Emissions
- **200kHz Current Mode Flyback Topology:** Fully Regulated Outputs With Low Ripple and Fast Transient Response Times
- **On-Off Control Function:** Grounding on-off pin inhibits output
- **Output Voltage Selection:** Other Output Voltages/Combinations May Be Specified; Consult Factory
- **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 Input Transients of DO-160G
- **Compact, Encapsulated Construction:** Small Footprint with Long Life and Reliable Operation in Severe Operational Environments
- **Signals, Functions:** Power supply watchdog signals - FAIL/OK, PDW, RESET; ADJUST Function.
- **Two Grades Available:** Commercial -40°C to +85°C and Rugged -55°C to +105°C

# 3704

**MODEL: 3704 28VDC**  
**INPUT RANGE : 16-50VDC**

## SELECT A COMBINATION OF OUTPUTS A WITH B AND C

### OUTPUT A

PARAMETER	CONDITION	UNITS	OUTPUTS
Vout	Setpoint ±2%	DC Volts	5.0
Iout	Vin min-max	Amperes	1.0
Efficiency	Rated Load	Percent Min	76
Line Reg	Vin min-max	mV max	50
Load Reg	10% to Rated Load	mV max	50
Vout Ripple	Rated Load, 20MHz BW	mVpp max	50

### OUTPUTS B+ AND C-

PARAMETER	CONDITION	UNITS	OUTPUTS			
Vout	Setpoint ±2%	DC Volts	±12.0	±12.6	±15.0	±15.3
Iout	Vin min-max	Amperes	0.40	0.40	0.40	0.40

28VDC INPUT DC-DC CONVERTERS

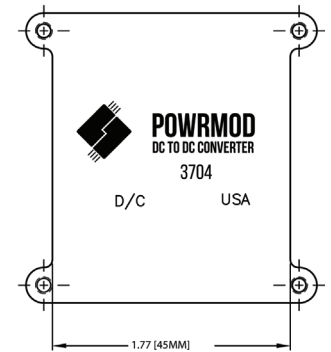
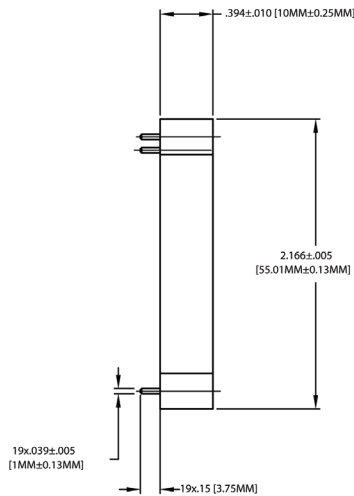
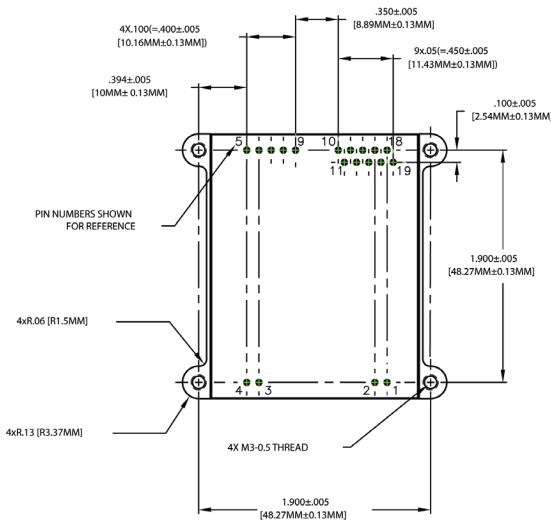


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## MECHANICAL SPECIFICATIONS

Size	2.16 (55) L x 1.77 (45) W x .344 (10) H inch (mm) body
Enclosure	Metal case
Construction	Encapsulated sealed
Pins	.039 alloy
Weight	85g typical
Mounting	Thru-Hole PWB (TH) mount, any orientation provided metal case is heatsunk



## PIN FUNCTIONS

	1	2	3	4	5	6	7	8	9	10
Function for Triple Outputs	On-Off Control	NC	Vin+	Vin Rtn	Vout C-	Vout B+	Vout Com Rtn	Vout Com Rtn	Vout A+	Fail
	11	12	13	14	15	16	17	18	19	
	NC	PWD	NC	Reset	NC	NC	NC	Adj	NC	

NC IS NO CONNECTION. CHASSIS GROUND IS VIA MOUNTING BOSSES

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

## PART NUMBERING CONSTRUCTION KEYS SELECT A COMBINATION OF OUTPUTS A WITH B AND C

**MODEL**

3704

**OUTPUT TYPE & VOLTAGE**

OUTPUT A	OUTPUT B	OUTPUT C
T5.0	/12.0	/12.0
	/12.6	/12.6
	/15.0	/15.0
	/15.3	/15.3

**ENCLOSURE**

MOUNTING  
T = THRU HOLE

**GRADE**

GRADE LEVEL  
C = COMMERCIAL  
R = RUGGED

EXAMPLE: 3704-T5.0/15/15TR