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600W Module DC to Dc power supply > CFB600W-110S



FEATURES

- * 600W Isolated Output
- * Efficiency to 88%
- * Regulated Outputs
- * Isolated Remote On/Off
- * Over Temperature Protection
- * Over Voltage/Current Protection
- * Continuous Short Circuit Protection
- * Full-Brick Size Meet Industry Standard
- * Meet EN50155 with External Circuits
- * Shock & Vibration Meet EN50155 (EN61373)
- * Meet UL60950-1 2nd (Basic Insulation)
- * Fire & Smoke Meet EN45545-2



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF. (3)	CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD		
CFB600W-110S12	43-160 VDC	12 VDC	0 mA	50 A	25 mA	6.3 A	87	10000µF
CFB600W-110S24	43-160 VDC	24 VDC	0 mA	25 A	25 mA	6.2 A	88	10000µF
CFB600W-110S28	43-160 VDC	28 VDC	0 mA	21.4 A	25 mA	6.2 A	88	10000µF
CFB600W-110S48	43-160 VDC	48 VDC	0 mA	12.5 A	25 mA	6.2 A	88	10000µF

NOTE:

1. Nominal Input Voltage 110 VDC.
2. The Output Terminal Required a Minimum Capacitor 470uF to Maintain Specified Regulation.
3. Measure at Nominal Input Voltage.



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SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

Input Voltage Range 110V 43 - 160V
 Input Surge Voltage (100ms max.) 180Vdc max.
 Under Voltage Lockout Power Up 42V
 Power Down 40V
 Opto Isolated Remote On/Off (note8)
 Input Filter PI Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy ±1.0% max.
 Transient Response: 25% Step Load Change <500us
 External Trim Adj. Range 60% - 110%
 Ripple & Noise, 20MHz BW(note3)
 12V 60mV RMS, 120mV pk-pk max.
 24V 100 mV RMS, 240mV pk-pk max.
 28V 100 mV RMS, 280mV pk-pk max.
 48V 200 mV RMS, 480mV pk-pk max.
 Temperature Coefficient ±0.03%/°C max.
 Short Circuit Protection Continuous
 Line Regulation (note1) ±0.2% max.
 Load Regulation (note2) ±0.5% max.
 Over Voltage Protection trip Range , % Vo nom. 115-140%
 Current Limit 105-140% Nominal Output
 Auxiliary Output Voltage/Current 10±3Vdc/20mA max.
 Load Share Accuracy ±10% at 50% to 100% Full Load
 Start up time 160ms typ.

GENERAL SPECIFICATIONS:

Efficiency See Table
 Isolation Voltage Input/Output, Input/Case 2250VDC min.
 Output/Case 1500VDC min.
 Isolation Resistance 10⁷ ohm min.
 Isolation Capacitance 4000pF typ.
 Switching Frequency 250KHz typ.
 Operating Case Temperature -40°C to 100°C
 Storage Temperature -55°C to +105°C
 Thermal Shutdown, Case Temp. 110°C typ.
 Humidity 95% RH max. Non condensing
 Operating Altitude 2000m
 MTBF MIL-HDBK-217F, GB, 25°C, Full Load 450Khrs typ.
 Safety UL60950-1 2nd(Basic insulation)
 EMC (note5) Meet EN50155(EN50121-3-2) with External Filter
 Shock/Vibration Meet EN50155(EN61373)
 Environmental Meet EN50155(EN60068-2-1)
 Dimensions 4.60×2.40×0.50 inches (116.8×61.0×12.7mm)
 Case Material Aluminum Baseplate with Plastic Case
 Weight 220g

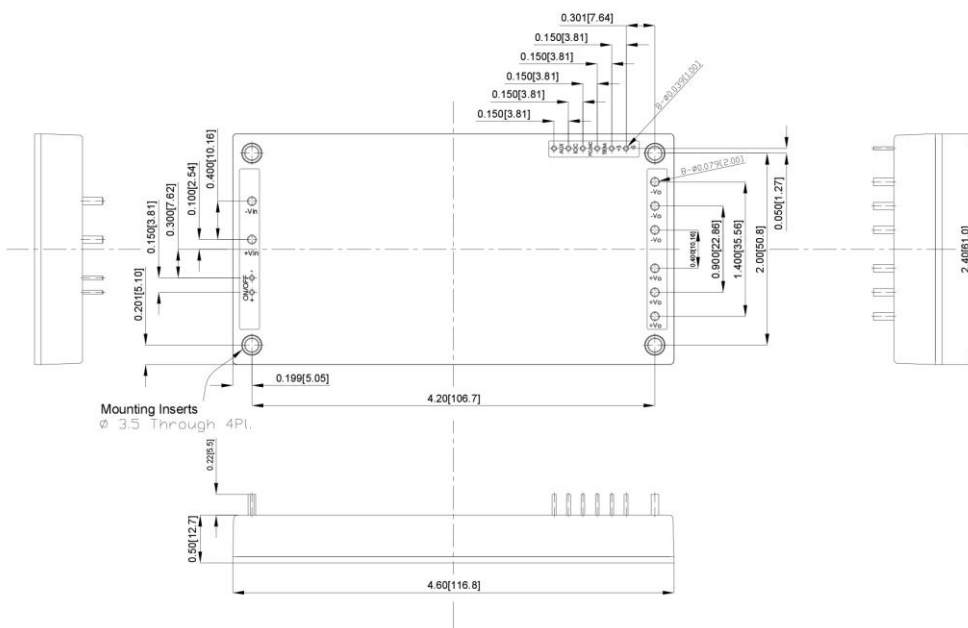
NOTE:

1. Measured from high line to low line.
2. Measured from full load to zero load.
3. Output ripple and noise measured with 10uF tantalum capacitor and 1uF ceramic capacitor across output.(48V: 10uF aluminum capacitor and 1.0uF ceramic capacitors)
4. An external input capacitor 220uF for all models are recommended to reduce input ripple voltage.
5. For information about EN50155 and RIA12, refer to application note.
6. Trim-up: connect a resistor between trim pin and +sense.
Trim-down: connect a resistor between trim pin and -sense.
7. Suffix "-CO" to the model number with threaded mounting holes (M3x0.5).
8. Standard model is negative logic, suffix "P" to the model number with positive logic. (refer application note)

CASE FB

All Dimensions in Inches[mm]
 Tolerance Inches:x.xx=±0.02 , x.xxx=±0.01
 Millimeters:x.x=±0.5 , x.xx=±0.25

Pin
 ±0.004
 ±0.1



PIN CONNECTION

PIN NUMBER	CONNECTION
1	-V Input
2	+V Input
3	-On/Off
4	+On/Off
5~7	+V Output
8~10	-V Output
11	-Sense
12	+Sense
13	TRIM
14	PC
15	IOC
16	AUX