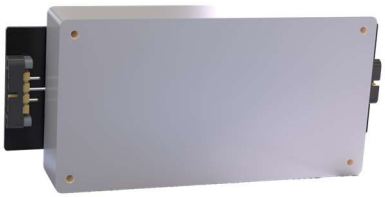
VRF-MIL-02-A

115VAC 3Ø 400Hz Military High Density Rectifier Filter Module





VIPULSE Technology offers a variety of high input voltage DC-DC military/industry standards converters from 50W-750W and filters which can be used to build a complete solution for the power systems.

The VRF Rectifier Filter module accepts 3Ø 200VAC L-L 400Hz, which it full wave rectifies and filters to achieve 270VDC at the output. While rectifying AC input, VRF has also EMI filtering features which meet MIL-STD-461C CE03 and MIL-STD-461D-E CE102. This rectifier/filter is specifically designed to interface with VIPULSE VDC series converter products.

The VRF Rectifier Filter module provides both differential and common mode filtering.

FEATURES

- Max. 830W Output
- MIL-STD-704A-F compatible
- Matched with VIPULSE Converters
- –55°C to +125°C Operating Range
- MIL-S-901C Shock
- MIL-STD-810C compatible
- MIL-STD-461C CE03 Compatible
- MIL-STD-461D-E CE102 Compatible
- Conduction Cooling
- No External Components Required
- Ruggedized
- No aluminum electrolytic capacitors
- Isolated Case
- Custom models available
- Customized connector input/output
- Consult VIPULSE Technology for special requirements

ELECTRICAL CHARACTERISTICS

Parameter	Minimum	Typical	Maximum	Conditions
INPUT VOLTAGE RANGE	160VAC L-L 400Hz	200VAC L-L 400Hz	270VAC L-L 400Hz	Steady state per MIL-STD-704A-F
INPUT TRANSIENTS	110 L-L		320 L-L	Steady state per MIL-STD-704A-F
OUTPUT VOLTAGE		Rectified 3Ø AC		270V @200VAC L-L 400Hz
OUTPUT CURRENT			3.1A	
EFFICIENCY	93%			
POWER FACTOR		1% p-p	2% p-p	20MHz BW.
LINE REGULATION	0.94	0.95		
ISOLATION VOLTAGE				
(Input/Output)	Non-Isolated			
(Input/Case)		10Mohm @1000VDC		
(Output/Case)		10Mohm @1000VDC		

ENVIRONMENTAL SPECIFICATIONS

Parameter	Minimum	Typical	Maximum	Conditions
OPERATING TEMPERATURE RANGE	-55°C		+125°C	Conductive Cooling with baseplate
STORAGE TEMPERATURE RANGE	-55°C		+130 °C	
HUMIDITY	MIL-STD-810C, Method 507.1, Proc. IV MIL-STD-810F, Method 507.4			
ALTITUDE	up to 70,000 ft			
SALT FOG	MIL-STD-810C, Method 509.1, Proc. I MIL-STD-810F, Method 509.4			
VIBRATION	MIL-E-5400T, Curve IVa, 5Hz to 2KHz			
SHOCK	MIL-S-901C-D, Grade A, Type A, Class 1 High Impact Shock			
MTBF	160.000hrs			MIL-HDBK-217F, @60°C baseplate

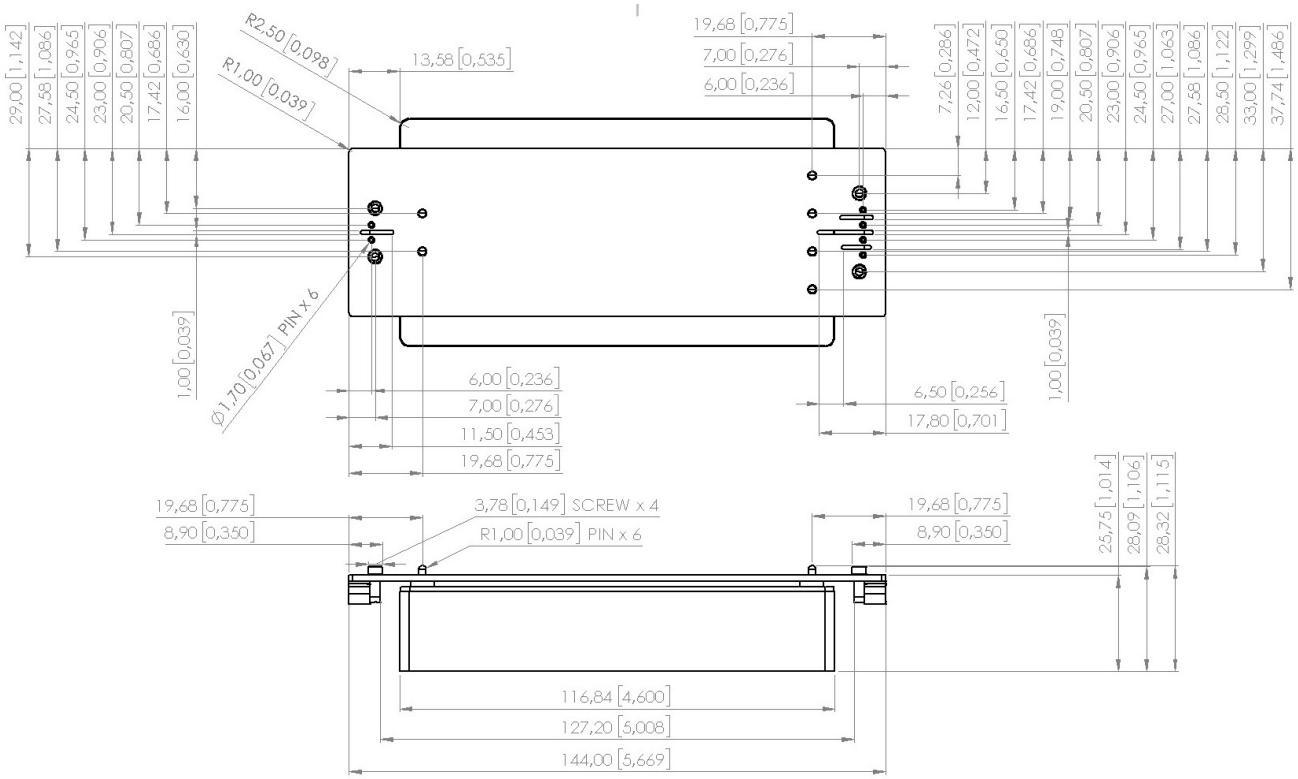
PHYSICAL CHARACTERISTICS

Parameter	Minimum	Typical	Maximum	Conditions
DIMENSIONS (LxWxH)		See Mechanical Drawings		
WEIGHT	340g	350g	360g	
CONSTRUCTION		Fully Alumunium Shielded		

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MECHANICAL DIMENSIONS (**)

Dimensions in inches (in mm), for reference only.



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