OHM POWER SOLUTIONS

MR150TR

120/125Watt

Triple Output Isolated

DC/DC Converter

Features:

- Designed to meet MIL-STD-810F
- High Efficiency – up to 89% (*Full Load @ 25°C*)
- Fully protected for Over Load/Short, Over-voltage and Over-Temperature
- Triple output isolated
- Base Plate cooling
- No external EMI filter needed

Typical applications:

- Military
- Ruggedized
- Telecom
- Industrial

General specification	
DC Input	
Input voltage range	16-70V_{DC}
Input Per MIL-STD-704	(Including 80V for 100ms – no damage)
Input Per MIL-STD-1275D	(Including 100V for 50ms – no damage)
Protection	Reverse Polarity Protection
DC Output	
Output voltage / Current	See table below
Line Load & Temperature regulation	< +/-2%
Current limit on each output	115% - 140% of rated current
OVP	Over-Voltage on each output - Non-latch type
Turn on Transient	No turn on transient
Isolation	
Input to Output:	200 V_{DC}
Input to Case:	200 V_{DC}
Output to Case:	100 V_{DC}
Interface	
Control Signals	**TTL** logic enable
Inhibit Signals	An INHIBIT line (with internal pull-up), which turns on the P.S. **TTL** "1"or OPEN – Power supply is OFF *(For normal operation, leave this pin unconnected)* **TTL** "0" or SHORT to SIGNAL RTN – Power supply is ON *(For normal operation, leave this pin unconnected)*
Signal RTN	Return Line of Input Signals INHIBIT and SYNC. Internally connected to return of Input Aux. P.S. – Not Isolated from Input
External Sync	Optional
Environmental	
Operating Temperature	–40°C to +90°C Base plate
Over-Temperature protection	at 100-110°C with auto recovery
Shock & Vibration	per MIL-STD-810F
EMI-RFI	per MIL-STD-461E
Mechanical	
Size	115mm x 90mm x 15.5mm
Weight	280 grams
Cooling	Base plate
Input / Output connector	30 PIN Airborne P/N M55302/61-A30 or Eq.

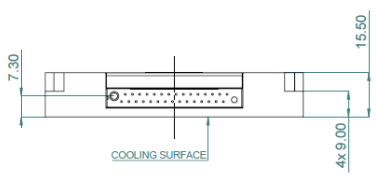
Ordering Information

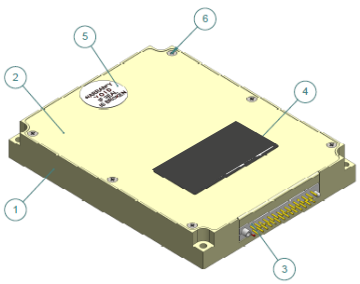
MODEL #	OUTPUT #	INPUT Voltage (V)	OUTPUT Voltage (V)	OUTPUT Current (A)	POWER (W)	POWER TOTAL (W)	R&N (mV)
MR150T	3	16-70	+5	7	35	125	50
			+15	3	45		50
			-15	3	45		50
MR150TE1	3	16-70	5	9	45	120	50
			+12	5	60		50
			+15	1	15		50

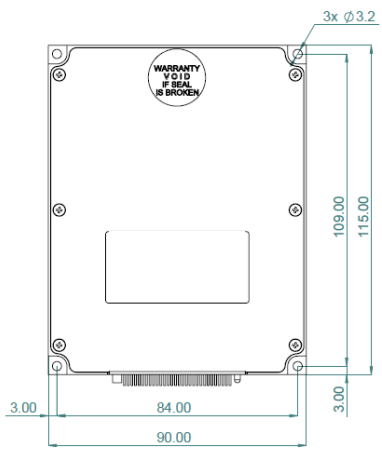
PIN -VINAssignment

PIN #	PIN Function	PIN #	PIN Function	PIN #	PIN Function
1	+5.0 V	**12**	+Vin_RTN	**23**	+15V
2	+5.0 V	**13**	+Vin_RTN	**24**	+15V_RTN
3	+5.0 V	**14**	+Vin	**25**	INHIBIT
4	+5.0V_RTN	**15**	+Vin	**26**	+Vin_RTN
5	+5.0V_RTN	**16**	+5.0V	**27**	+Vin_RTN
6	+12V	**17**	+5.0V	**28**	$+V_{IN}$
7	+12V_RTN	**18**	+5.0V_RTN	**29**	$+V_{IN}$
8	+15V	**19**	+5.0V_RTN	**30**	SYN INPUT
9	+15V_RTN	**20**	+5.0V_RTN		
10	Not Connected	**21**	+12V		
11	SIGNAL RTN	**22**	+12V_RTN		

Outline Drawing







Note: Specifications are subject to change without prior notice by the manufacturer.
Additional configurations and modifications available. Contact us for more details.