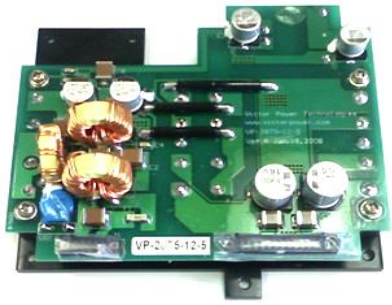
Victor Power Technologies

Global DC/DC Converter Manufacturer



VP-28T5-12-5

107 Watts

107W TRIPLE OUTPUT
2:1 INPUT
ISOLATED & REGULATED
EMI FILTER BUILT IN
MEET MAJOR MIL-SPEC.
HIGH DENSITY
WELCOME CUSTOMER DESIGNS

- 2:1 Input
- Nominal 28VDC (18~36VDC)
- Efficiency > 80%
- Triple Output
- Operating Temperature: -40°C~+70°C
- 1KVDC Isolation
- Metal Shielding Package
- MTBF>500,000 hours
- Short circuit protection
- Heat sink request

Product Program

Part Number	Input Voltage (VDC)		Output Voltage	Output Current	Efficiency (%, Typ)
VP-28T5-12-5	28	18~36	12	4.5A	> 80%
			5	10.0A	
			5	0.5A	

ISOLATION SPECIFICATIONS

Isolation voltage	Input to Output Input to case	>1000	VDC
	Output to case	>500	VDC
Isolation resistance	Test at 1000VDC	$>10^9$	Ω
Vibration	10 ~ 55Hz	10G, 30min	

COMMON SPECIFICATION

Efficiency	> 80%
Approvals and standard	IEC60950-1, UL60950-1, EN60950-1
Switching frequency	300KHz, typ
Case material	Aluminum Case
Base material	Aluminum Case
Potting material	Epoxy (UL94-V0)
Dimensions	3"x5"x2"
Weight	N/A
MTBF	5×10^5 hrs

OUTPUT SPECIFICATION

Output power			107 Watts
Voltage accuracy	FL and nominal Vin		<±1%
Minimum load			10% of FL
Line regulation	LL to HL at Full Load		<± 0.5%
Load regulation	10% to 100% FL		<± 1%
Cross regulation (Dual)	Asymmetrical load 25% / 100% FL		± 5%
Ripple and noise	20MHz bandwidth	5V	50mVp-p
		12V	120mVp-p

Temperature coefficient		±0.02% / ºC
Transient response recovery time	25% load step change	250uS
Min. load		7W
Over load protection	% of FL at nominal input	110~150%
Short circuit protection		Hiccup, automatics recovery

OTHER REQUIREMENTS

MIL-STD 1275A & D	
MIL-STD 810F paragraph 514.5	
Turn on time	<100ms
Revise Polarity Protection	-V500

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	-40ºC ~ +70ºC
Maximum case temperature	105ºC
Storage temperature range	-55ºC ~ +105ºC
Temperature impedance	12ºC/watt
Thermal shock	MIL-STD-810D
Vibration	10~55Hz, 3G, 30minutes along X,Y and Z
Relative humidity	5% to 95% RH

EMC REQUIREMENTS

Conducted Emissions	
MIL-STD-461E CE102	
Radiated Emissions	MIL-STD-461E RE102
ESD Immunity	MIL-STD-202G method 302, test condition B potential 500 V±10%
Radiated Immunity	MIL-STD-461E RE102
Conducted Immunity	MIL-STD-461E CE102

TYPICAL CHARECTERISTICS

Cooling	No fan, passive cooling by the housing only
EMC Filter	Build in
Common Ground	For 12V & 5V Outputs
Altitude	50000ft
Drawing & Dimension	See attachment
Connectors Input	M80-5101042 (10 pin)

(Harwin) +Vi : 1, 2, 6, 7 (4Pin)
-Vi : 4, 5, 9, 10 (4Pin)
N/C： 3, 8 (2Pin)

Output M80-5102642 (26 Pin)
+12V/4.5A: 3, 4, 16, 17 (4Pin)
- 12V/4.5A: 5, 6, 18, 19 (4Pin)
+5V/10A: 10, 11, 12, 13, 24, 25, 26 (7Pin)
-5V/10A： 7, 8, 9, 20, 21, 22, 23 (7Pin)
+5V/0.5A：2, 15 (2Pin)
-5V/0.5A： 1,14 (2Pin)

OUTLINE DIMENSIONS