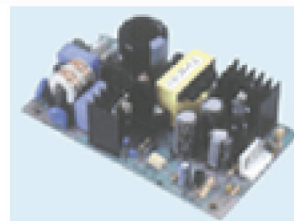




- .LOW COST, HIGH RELIABILITY
- .105°C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE



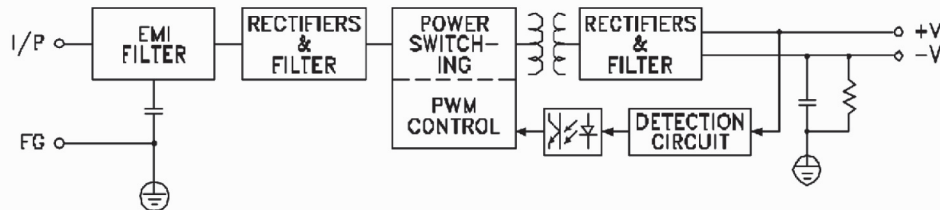
MODEL	VPS25-3.3	VPS25-5	VPS25-7.5	VPS25-12	VPS25-13.5	VPS25-15	VPS25-24	VPS25-27	VPS25-48
SPECIFICATION									
DC OUTPUT VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±3%	±2%	±2%	±2%	±2%	±2%	±2%	±2%	±2%
OUTPUT RATED CURRENT	5A	5A	3.3A	2.1A	1.9A	1.7A	1A	0.9A	0.5A
OUTPUT CURRENT RANGE	0-5A	0-5A	0-3.3A	0-2.1A	0-1.9A	0-1.7A	0-1A	0-0.9A	0-0.5A
RIPPLE & NOISE	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	100mVp-p	240mVp-p	240mVp-p	350mVp-p
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
LOAD REGULATION	±2.5%	±2%	±2%	±1%	±1%	±1%	±0.5%	±0.5%	±0.5%
DC OUTPUT POWER	16.5W	25W	24.8W	25.2W	25.7W	25.5W	24W	24.3W	24W
EFFICIENCY	66%	74%	76%	78%	78%	78%	79%	79%	79%
DC VOLTAGE ADJ.	-----								
INPUT VOLTAGE RANGE	85~264VAC 47~63Hz; 120~370VDC								
AC CURRENT	0.65A/115V 0.4A/230V								
INRUSH CURRENT	COLD START 40A								
LEAKAGE CURRENT	<0.5mA/240VAC								
OVERLOAD PROTECTION	ABOVE 105% TYPE:PULSING HICCUP SHUTDOWN RESET:AUTO RECOVERY								
OVER VOLTAGE PROTECTION	115%~135%								
OVER TEMP. PROTECTION	U1 Tj 135°C TYPICALLY POWER SHUTDOWN								
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)								
SETUP, RISE, HOLD UP TIME	200ms, 30ms, 17ms/115VAC 200ms, 20ms, 80ms / 230VAC								
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES								
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC								
ISOLATION RESISTANCE	I/P-O/P, I/P-FG:500VDC / 100M Ohms								
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH								
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH								
DIMENSION	107*61*30mm								
WEIGHT	0.15Kgs								
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED								
EMC STANDARDS	CISPR22 (EN55022), IEC1000-4-2,3,4,5 IEC1000-3-2,3 VERIFICATION								

NOTE : 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
2.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
3.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.

MAY.07.98

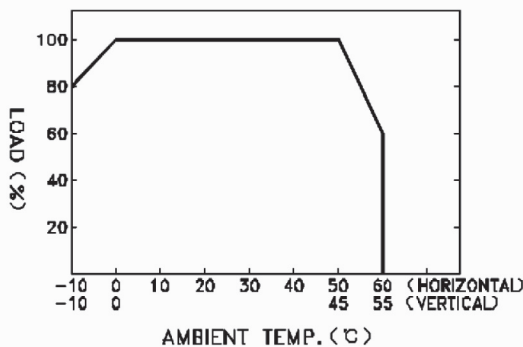


BLOCK DIAGRAM

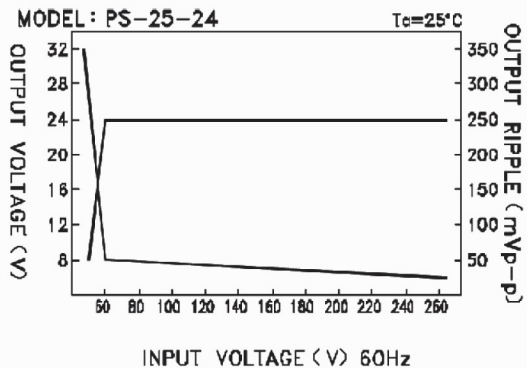


fosc: 100KHz

OUTPUT DERATING



STATIC CHARACTERISTICS



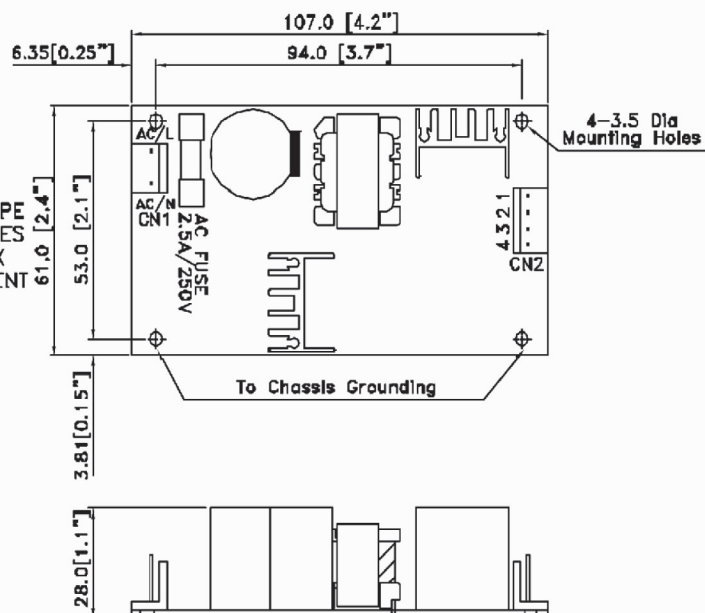
DIMENSION:mm[inch]

☒ TERMINAL PIN NO. ASSIGNMENT

- ☒ CN1 : MOLEX 41791-03
PIN 1,3 : AC INPUT
- ☒ CN2 : MOLEX 41791-04
PIN 1,2 : DC OUTPUT +V
PIN 3,4 : DC OUTPUT -V

☒ MATING CONNECTORS

- ☒ CN1,2 MATING CONNECTOR TYPE
MOLEX 2139 AND 3069 SERIES
OR EQUIVALENT WITH MOLEX
2478 AND 2578 OR EQUIVALENT
CRIMP TERMINALS.





Quality Engineering Test Report

SERIES: VP25 25W AC-DC SIGLE OUTPUT SWITCHING POWER SUPPLY OPEN FRAME TYPE

SAMPLE: A.VP25-3.3 3.3V / 5A D.VP25-12 12V /2.1A G.VP25-24 24V /1A
B.VP25-5 5V /5A E.VP25-13.5 13.5V /1.9A H.VP25-27 27V /0.9A
C.VP25-7.5 7.5V /3.3A F.VP25-15 15V /1.7A I. VP25-48 48V /0.5A

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	AC INPUT VOLTAGE RANGE	I/P:TESTING SPEC:85~264VAC O/P:FULL LOAD	A:74VAC~267VAC	P
2	LINE REGULATION	I/P:85~264VAC SPEC: A: ±0.5% O/P:FULL LOAD B: ±0.5% C: ±0.5% D: ±0.3% E: ±0.3% F: ±0.3% G: ±0.2% H: ±0.2% I: ±0.2%	A: 0 % ~ 0.183% B: 0 % ~ 0.1% C: 0 % ~ 0% D: 0 % ~ 0.05% E: -0.04% ~ 0 % F: 0 % ~ 0 % G: -0.03% ~ 0 % H: 0 % ~ 0 % I: -0.03% ~ 0.01%	P
3	LOAD REGULATION	I/P:230VAC SPEC: A: ±2.5% O/P: B: ±2% MIN. TO FULL LOAD C: ±2% D: ±1% E: ±1% F: ±1% G: ±0.5% H: ±0.5% I: ±0.5%	A: -0.36% ~ 0.54% B: -0.24% ~ 0.12% C: -0.158% ~ 0.238% D: 0 % ~ 0.05% E: -0.04 % ~ 0.08% F: 0 % ~ 0.04% G: -0.03% ~ 0 % H: -0.022% ~ 0.022% I: -0 % ~ 0.01%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P:85~264VAC SPEC: A: ±3% O/P: B: ±2% MIN. TO FULL LOAD C: ±2% D: ±2% E: ±2% E: ±2% E: ±2% E: ±2% E: ±2%	A: -0.96% ~ 0% B: -0.25% ~ 0.12% C: -0.4% ~ 0.09% D: -0.05% ~ 0.06% E: -0.06% ~ +0.10% F: -0.04% ~ 0.04% G: -0.06% ~ 0.08% H: -0.069% ~ 0.25% I: -0.04% ~ 0.1%	P
5	RIPPLE& NOISE	I/P:230VAC SPEC: A:80mV O/P: FULL LOAD B:80mV C:80mV D:100mV E:100mV F:100mV G:240mV H:240mV I:350mV	A: 11mV B: 12mV C: 7mV D: 11mV E: 10mV F: 11mV G: 14mV H: 8mV I: 65mV	P
6	AC INPUT CURRENT	I/P:230VAC SPEC: 0.4A O/P:FULL LOAD	A:0.222A	P
7	MAX. INRUSH CURRENT	I/P:230VAC SPEC: 40A O/P:FULL LOAD	A:31.781A	P
8	O/P VOLTAGE ADJ.RANGE	I/P:230VAC SPEC:FIXED O/P:MIN. LOAD	A:3.325V B:5.08V C:7.593V D:12.06V E:13.512V F:14.96V G:24.03V H:27.237V I:47.98V	P



NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
9	SET UP TIME	I/P:230VAC SPEC:200ms O/P:FULL LOAD	A:94.38mS	P
10	HOLD UP TIME	I/P:230VAC SPEC:80mS O/P:FULL LOAD	A:202.969mS	P
11	EFFICIENCY	I/P:230VAC SPEC: A: 66% O/P: FULL LOAD B: 74% C: 76% D: 78% E: 78% F: 78% G: 79% H: 79% I: 79%	A: 68.59% B: 75.87% C: 78.51% D: 79.70% E: 79.1% F: 81.19% G: 83.11% H: 80.2% I: 80.58%	P
12	OVER LOAD PROTECTION	I/P:230VAC SPEC: ABOVE 105% O/P: TESTING FOLDBACK CURRENT SHUTDOWN AUTO RECOVERY	A: 205% B: 180% C: 187% D: 209% E: 211% F: 187% G: 325% H: 322% I: 320%	P
13	OVER VOLTAGE PROTECTION	I/P:230VAC SPEC:115~135% O/P:TESTING	A: 127.3% B: 124% C: 118.6% D: 118% E: 128% F: 116% G: 119% H: 135% I: 119%	P
14	OVER TEMPERATURE PROTECTION & FAN ON/OFF TEST	I/P:230VAC SPEC: O/P:FULL LOAD U1 Tj 135°C TYPICAL	B:OTP:121°C	P
15	GROUND LEAKAGE CURRENT	I/P:240VAC SPEC: L-FG--<0.5mA N-FG--<0.5mA	A: L-FG:0.25 mA N-FG:0.24mA	P
16	INSULATION RESISTANCE	SPEC: I/P-O/P 500VDC/100M Ohms MIN. I/P-FG 500VDC/100M Ohms MIN.	A: O/P-FG >100M Ohms I/P-O/P >100M Ohms	P
17	DIELECTRIC / WITHSTAND VOLTAGE	SPEC: I/P- O/P: 3000VAC/ 1 sec (10mA CUT-OFF) I/P - FG: 1500VAC/ 1 sec (10mA CUT-OFF)	A: I/P-O/P :0.881mA I/P-FG :1.531mA	P
18	BURN-IN TEST	I/P: 230VAC O/P:FULL LOAD TA:25.3°C BURN-IN DURATION : 1 hrs	B:NON BREAK	P
19	ENVIRONMENT TEST (SAMPLE B:)	1.LOW TEMPERATURE TEST I/P:80 VAC O/P:FULL LOAD AMBIENT TEMPERATURE:-9.0°C 2.HIGH AMBIENT TEMPERATURE FULL LOAD TEST I/P:230VAC O/P:FULL LOAD AMBIENT TEMPERATURE:55.†°C 3.ACCELERATED LIFE TEST I/P:265VAC O/P:FULL LOAD POWER ON :3 min POWER OFF :5 sec AMBIENT TEMPERATURE:85°C AMBIENT HUMIDITY:95%	AFTER 1.5 hrs POWER ON OK AFTER 40 hrs NON BREAK AFTER 16 hrs NON BREAK	P