SNP-Z05 Series

55W AC/DC Power Supply Units

CoolPower Solutions

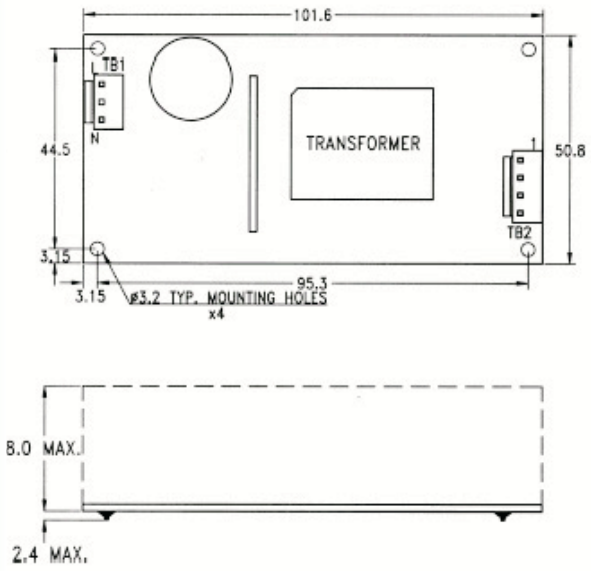
Description:

Open frame size of 3" X 5" has become an industrial standard for more than 10 years. The power density stays at 3.0 watts/cu.in. for a long time. Now, the SNP-Z05 series can offer up to 6.7 watts/cu.in. in 2" X 4" X 1.2" size at convection cooling. The safety conformity of SNP-Z05 series covers IT and medical applications. SNP-Z05 series is built with long-life components. For commodity application, ECO-Z05 series is the alternative.

General Specifications:

Input voltage ..... 90VAC to 264VAC
Input frequency..... 47Hz to 63Hz
Inrush current ..... less than 30A at 115VAC
less than 60A at 230VAC
cold start, 25°C
Outputs ..... see output table
Efficiency ..... 78%~87% depends on models
at rated load and 115VAC
Hold up time ..... 14mS typical
at rated load and 115VAC
Over load protection ..... auto recovery
Short circuit protection ..... auto recovery
Over voltage protection ..... latch off
Operating temperature ..... 0 to 60° C convection
derating: 2% / °C > 50°C
Cooling ..... free air convection
Storage temperature ..... -40° C to +85° C
EMI ..... FCC "B"
EN55022"B", EN55011"B"
EMS EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety ..... UL 60950, UL 2601
CSA 22.2 No.234, No. 601.1
EN 60950, EN 60601-1

Mechanical Specifications:



Notes:

1. Dimensions shown in mm (inch) as above.
   Tolerance: + -1mm (Excluding cables).
2. Size:
   101.6 X 50.8 X 30.4 (mm)
   4" X 2" X 1.2"
3. Connectors
   AC input : JST B2P3-VH or equivalent
   DC output : JST B4P-VH or equivalent
4. Pin assignment
   Pin 1 Vout
   2 Vout
   3 GND
   4 GND

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Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD MIN.	LOAD RATED	LOAD MAX.	VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.
SNP-Z056	+5V	0A	7A	9A	+4.95V~+5.05V	50mVpp	±0.5%	±0.5%
SNP-Z057	+12V	0A	4.6A	5.4A	+11.9V~+12.1V	0.5%	±0.5%	±0.5%
SNP-Z058	+15V	0A	3.7A	4.3A	+14.9V~+15.1V	0.5%	±0.5%	±0.5%
SNP-Z059	+24V	0A	2.3A	2.7A	+23.8V~+24.2V	0.5%	±0.5%	±0.5%
SNP-Z05T	+48V	0A	1.2A	1.4A	+47.6V~+48.4V	0.5%	±0.5%	±0.5%
SNP-Z05B	+3.3V	0A	8A	10A	+3.25V~+3.35V	50mVpp	±0.5%	±0.5%

Note:

1. The max. load can be provided at 40°C.
2. At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is setting to within the specified accuracy range at rated load.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
5. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line. For SNP-Z056 and SNP-Z05B, one extra 47uF electrolytic capacitor should be added.
6. Hold up time is measured from the end of the last charging pulse to the time which the main output drop down to regulation limit at rated load and nominal line.
7. Rated load is maximum loading for flat mounting and free air convection cooling.

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