ASTRODYNE

100W Single Output Switching Power Supply

AS-100F series



■ Features :

- AC input range selectable by switch
- Protections:Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 83KHz
- 2 years warranty

SPECIFICATION

MODEL		AS100F-5	AS100F-7.5	AS100F-12	AS100F-15	AS100F-24	AS100F-48
OUTPUT	DC VOLTAGE	5V	7.5V	12V	15V	24V	48V
	RATED CURRENT	20A	13.5A	8.5A	6.7A	4.5A	2.2A
	CURRENT RANGE	0 ~ 20A	0 ~ 13.5A	0 ~ 8.5A	0 ~ 6.7A	0 ~ 4.5A	0 ~ 2.2A
	RATED POWER	100W	101W	102W	100.5W	108W	105.6W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	125mVp-p	125mVp-p	125mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	6.75 ~ 8.25V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	43.2 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 30ms at full load					
	HOLD TIME (Typ.)	20ms at full load					
INPUT	VOLTAGE RANGE	88 ~ 132VAC/176 ~ 264VAC selected by jumper or switch 248 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	76%	78%	80%	81%	83%	84%
	AC CURRENT (Typ.)	3.15A/115VAC 1.5A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC					
	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVER LOAD	105 ~ 150% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	5.75 ~ 6.75V	8.63 ~ 10.13V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	55.2 ~ 64.8V
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	CSA60950-1 (for 24V only), UL1012, TUV EN60950-1 Approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A					
OTHERS	MTBF	314.9K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	199*98*38mm (L*W*H)					
	PACKING	0.65Kg; 20pcs/14.2Kg/0.8CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.						

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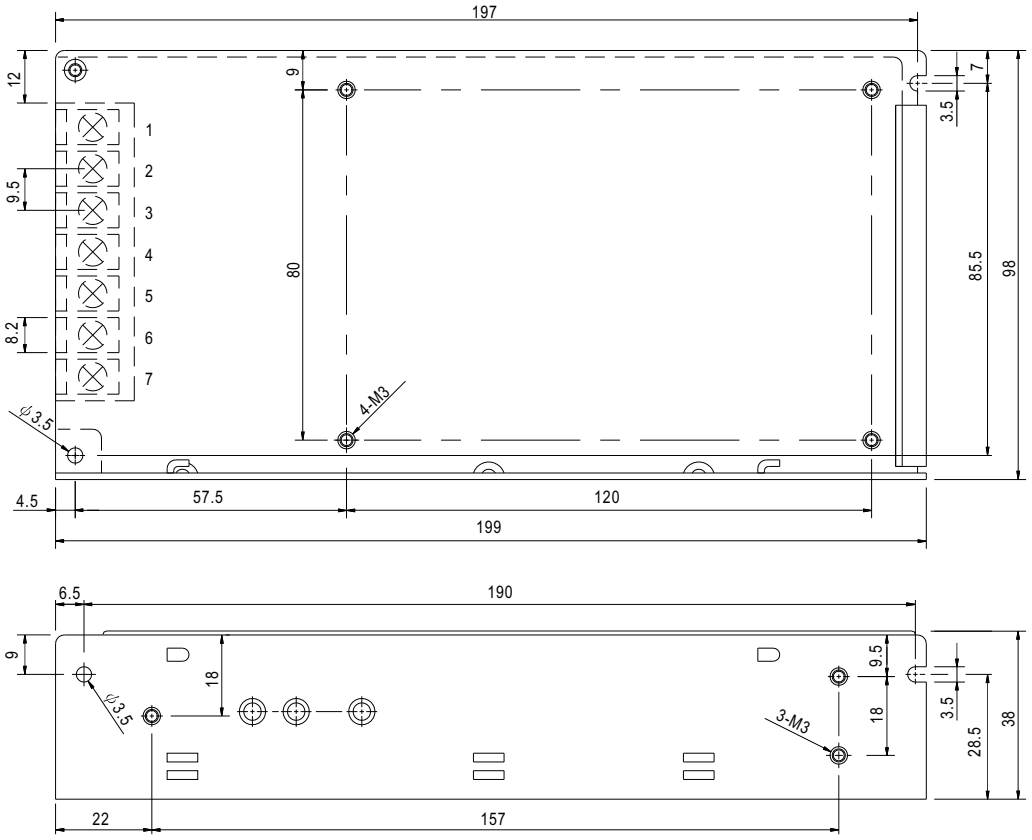
■ Mechanical Specification

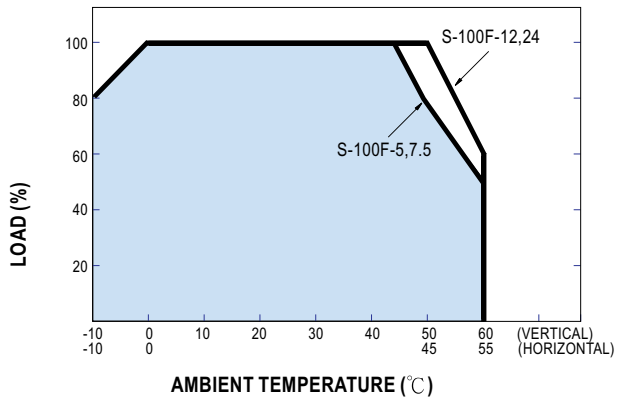
Case No. 902 Unit:mm



Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG ⏚		

■ Derating Curve



■ Static Characteristics (24V)

