

- Universal AC input
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Low leakage current <0.5mA
- Cooling by free air convection
- Low cost
- Fixed switching frequency at 100KHz
- High reliability



Model Number	Output Volts	Output Amps	OVP	Min Load	DC Volt Adjust	Load Reg	Efficiency
SINGLE OUTPUT							
PS25-3.3	3.3 Volts(DC)	5 Amps	3.8 ~ 4.46Volt(DC)	0~5Amps	3.14~3.63Volt(DC)	±2.5%	66%
PS25-5	5 Volts(DC)	5 Amps	5.75 ~ 6.75Volt(DC)	0~5Amps	4.75~5.5Volt(DC)	±2.0%	74%
PS25-7.5	7.5 Volts(DC)	3.3 Amps	8.6 ~ 10.1Volt(DC)	0~3.3Amps	6.0~9.0Volt(DC)	±2.0%	76%
PS25-12	12 Volts(DC)	2.1 Amps	13.8 ~ 16.2Volt(DC)	0~2.1Amps	10~13.2Volt(DC)	±1.0%	78%
PS25-13.5	13.5 Volts(DC)	1.9 Amps	15.5 ~ 18.2Volt(DC)	0~1.9Amps	12~15Volt(DC)	±1.0%	78%
PS25-15	15 Volts(DC)	1.7 Amps	17.3 ~ 20.3Volt(DC)	0~1.7Amps	13.5~18Volt(DC)	±1.0%	78%
PS25-24	24 Volts(DC)	1.0 Amps	27.6 ~ 32.4Volt(DC)	0~1.0Amps	20~26.4Volt(DC)	±0.5%	79%
PS25-27	27 Volts(DC)	0.9 Amps	31 ~ 36.5Volt(DC)	0~0.9Amps	26~31.5Volt(DC)	±0.5%	79%
PS25-48	48 Volts(DC)	0.5 Amps	55.2 ~ 64.8Volt(DC)	0~0.5Amps	41~56Volt(DC)	±0.5%	79%



25W Single Output Switching Power Supply

PS25 series

INPUT SPECIFICATIONS

Input Voltage Range	90 ~ 264VAC 120~370 Volts(DC)
Frequency Range	47-63 Hz
Inrush Current, typ: (cold start)	36 Amps
Input Current	0.6 Amps@115VAC 0.4 Amps@230VAC
Leakage current	< 0.5mAmps / 240VAC
Min Load	See Selection Chart

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±0.5%: 3.3~7.5Volts(DC) ±0.3%: 12~15Volts(DC) ±0.2%: 24~48Volts(DC)
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	3.0%: 3.3Volts(DC) 2.0%: 5~48Volts(DC)
Ripple/Noise (Note 1)	80mVpk-pk: 3.3~7.5Volts(DC) 100mVpk-pk: 12~15Volts(DC) 240mVpk-pk: 24~27Volts(DC) 350mVpk-pk: 48Volts(DC)
Hold Up Time @ FL	100mS /230VAC 20mS /115VAC
Setup, Rise Time @ FL	200mS, 20mS /230VAC 200mS, 30mS /115VAC
Over Voltage Protection	See Selection Chart Shut down o/p voltage, re-power
Over Current Protection	Above 105% rated output power Hiccup mode, auto recover
Over Temperature	Tj 135°C typ (U1) Detect on main control IC Shut down o/p voltage, auto recover after cool down
DC Voltage Adjust	See Selection Chart

GENERAL SPECIFICATIONS

Safety	UL60950-1, TUV EN60950-1 Approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)
EMI	Compliance to EN55022 (CISPR22) Class B
Harmonic Current	Compliance to EN61000-3-2,-3
Efficiency	See Selection Chart
Isolation	3000VAC Input - Output 1500VAC Input - Ground 500VAC Output - Ground
EMS	Compliance to EN61000-4-2,3,4,5 light Industry Level, Criteria A

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10°C to +60°C (See Derate Curve)
Storage Temperature	-20°C to +85°C, 10~95% RH
Relative Humidity	20~90% RH non cond
Temperature Coefficient	0.03% / °C (0-50°C)
MTBF	576.4Khrs min, MIL-HDBK-217F(25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	107 x 61 x 28 mm (4.21"x 2.40 "x 1.10")
Weight	4.94 oz (140g)

NOTE

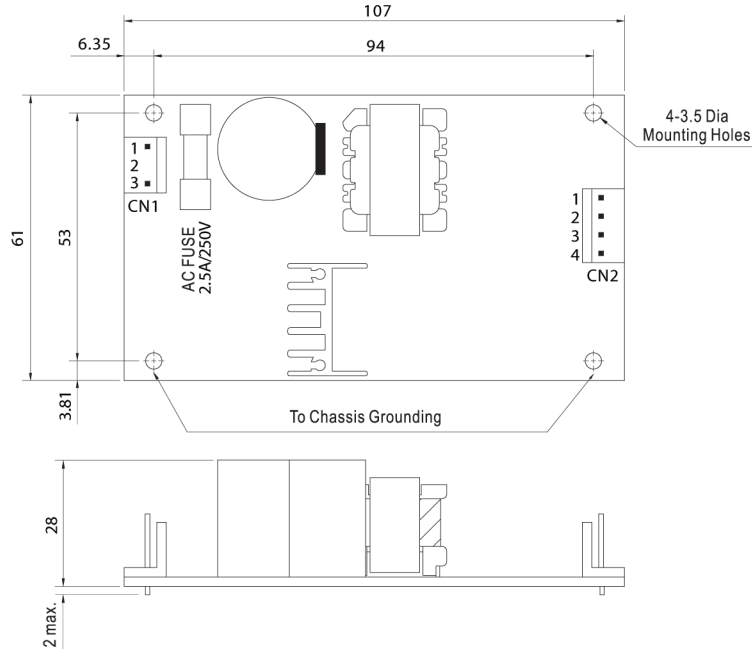
1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
2. Tolerance : includes set up tolerance, line regulation and load regulation.

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 41791-03 or equivalent

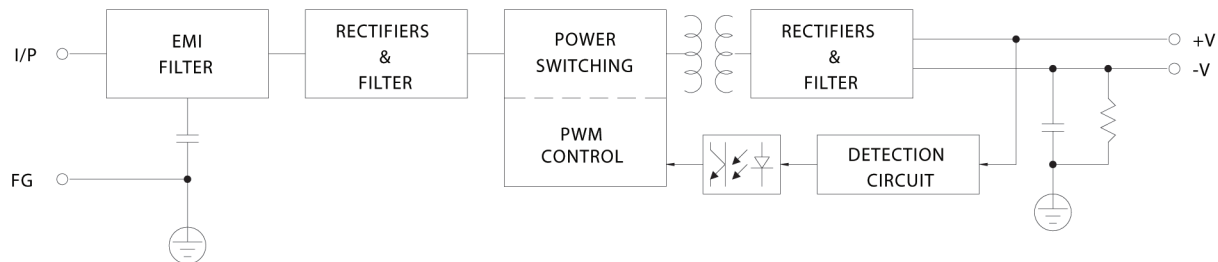
Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	Molex 2139 or equivalent	Molex 2478 or equivalent
2	No Pin		
3	AC/N		

DC Output Connector (CN2) : Molex 41791-04 or equivalent

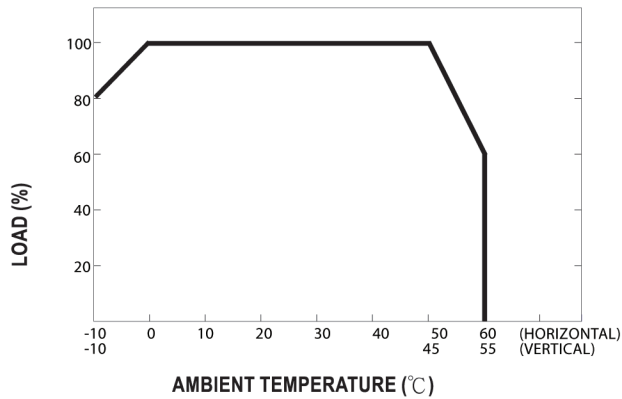
Pin No.	Assignment	Mating Housing	Terminal
1,2	+V	Molex 2139 or equivalent	Molex 2478 or equivalent
3,4	-V		

Block Diagram

fosc : 100KHz



■ Derating Curve



■ Static Characteristics (24V)

