



3.5"W x 6"L x 1.75"H

- Universal 88-264VAC Auto Range Input
- Compact Footprint
- High Efficiency
- Regulated Outputs
- 3000V Isolation
- Built in EMI Filter



| Model Number | Output Voltage | Output Amps (max) | Ripple/Noise pp,typ |
|--------------|----------------|-------------------|---------------------|
| MK150S-5     | 5 VDC          | 30                | 100mv               |
| MK150S-12    | 12 VDC         | 12.5              | 100mv               |
| MK150S-15    | 15 VDC         | 10                | 100mv               |
| MK150S-24    | 24 VDC         | 6                 | 100mv               |



### INPUT SPECIFICATIONS

|                      |                     |
|----------------------|---------------------|
| Input Voltage Range  | 88-132/176-264 VAC  |
|                      | Auto Voltage Select |
| Frequency Range      | 47-63 Hz            |
| Inrush Current, typ: | 20A @ 100VAC *      |
|                      | 40A @ 200VAC *      |

### OUTPUT SPECIFICATIONS

|                               |                            |
|-------------------------------|----------------------------|
| Voltage and Current           | See Selection Chart        |
| Line/Load Regulation (10%-FL) | ± 0.5%, typ                |
| Voltage Tolerance             | ± 1%, typ                  |
| DC Voltage Adjust (typ)       | ± 6%, typ                  |
| Temperature Coefficient       | ± 0.03%/°C                 |
| Ripple/Noise                  | 100mV, typ                 |
| Over Voltage Protection       | 130%, Latching, Re-power * |
| Short Circuit Protection      | 160%, Indefinite           |
| Hold Up Time                  | 20mS, typ (Nom I/P, FL)    |
| Turn On Time                  | ≤ 1.0 sec, typ             |
| Rise Time                     | ≤ 20 msec, typ             |
| Over/Under Shoot              | < 10% of FS                |

### GENERAL SPECIFICATIONS

|                     |                          |
|---------------------|--------------------------|
| Isolation           | I/P-O/P: 3000VAC         |
|                     | I/P-Ground: 1500VAC      |
|                     | O/P-Ground: 500 VAC      |
| Efficiency          | 78%, typ                 |
| Switching Frequency | 100Khz, (fixed, typical) |
| Safety              | EN60950, IEC60950        |
|                     | UL60950                  |

### ENVIRONMENTAL SPECIFICATIONS

|                        |                        |
|------------------------|------------------------|
| Oper. Temperature      | 0 to +60°C             |
|                        | (See Derate Curve)     |
| Storage Temperature    | -25 to +85°C *         |
| Relative Humidity      | 10% to 90%, non-cond * |
| EMI (Designed to Meet) | EN55011, Class B       |
| MTBF                   | 100,000 Hrs            |
|                        | Mil Std 217, 25°C      |

### PHYSICAL SPECIFICATIONS

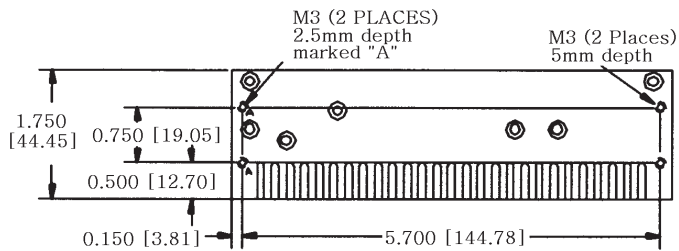
|              |                   |
|--------------|-------------------|
| Size         | 6" x 3.5" x 1.75" |
| Construction | Enclosed          |
| Weight       | 1.37 lb, (630g)   |

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

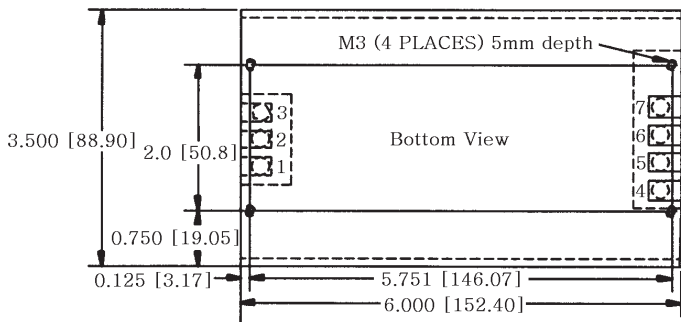
\* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

**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 DIMENSIONS



DIMENSIONS ARE IN INCHES [mm]  
TOLERANCE .XXX +/- .02 [508]



| Pin # | Outputs  |
|-------|----------|
| 1     | ACN      |
| 2     | ACL      |
| 3     | GND      |
| 4     | + Output |
| 5     | + Output |
| 6     | - Output |
| 7     | - Output |

#### PLEASE NOTE:

To improve specifications and safety isolation, connection designations may have changed from prior revisions. Please verify connections per product labels on input and output connections prior to applying power to the unit

### OUTPUT DERATING CURVE

(Forced air cooling direction: Straight down from top of unit)

- 1 — 22CFM Forced Air - All Outputs (Recommended)
- 2 — 12/15/24VDC Outputs, Convection Cooled
- 3 — 5VDC Output, Convection Cooled

