



PCB Mount as small as
3.5"L x 2.5"W x 0.98"H



Chassis 4.76"L x 2.56"W x 1.0"H

- Single / Dual / Triple Outputs
- Universal 90 to 264VAC Input
- 3.3VDC to 24VDC Outputs
- 3,000VAC Input to Output Isolation
- PCB and Chassis Mount Packages



| Model Number | Output Voltage | Output Amps | Output Watts |
|---------------------------------------|----------------|-------------|--------------|
| SINGLE OUTPUT - PCB Mount | | | |
| MSCA-0300 | 3.3 VDC | 7.5 | 25W |
| MSCA-0301 | 5 VDC | 6 | 30W |
| MSCA-0302 | 12 VDC | 2.5 | 30W |
| MSCA-0303 | 15 VDC | 2 | 30W |
| MSCA-0305 | 24 VDC | 1.25 | 30W |
| SINGLE OUTPUT - Chassis Mount | | | |
| MSCC-0300 | 3.3 VDC | 7.5 | 25W |
| MSCC-0301 | 5 VDC | 6 | 30W |
| MSCC-0302 | 12 VDC | 2.5 | 30W |
| MSCC-0303 | 15 VDC | 2 | 30W |
| MSCC-0305 | 24 VDC | 1.25 | 30W |
| SINGLE OUTPUT - DIN Rail Mount | | | |
| MSCC-0300/DRL | 3.3 VDC | 7.5 | 25W |
| MSCC-0301/DRL | 5 VDC | 6 | 30W |
| MSCC-0302/DRL | 12 VDC | 2.5 | 30W |
| MSCC-0303/DRL | 15 VDC | 2 | 30W |
| MSCC-0305/DRL | 24 VDC | 1.25 | 30W |



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| Model Number | Output Voltage | Output Amps | Output Watts |
|---------------------------------------|----------------|-------------|--------------|
| DUAL OUTPUT - PCB Mount | | | |
| MDCA-0306 | ±12 VDC | ±1.25 | 30W |
| MDCA-0307 | ±15 VDC | ±1 | 30W |
| MDCA-0308 | +5/12 VDC | 3/1.25 | 30W |
| DUAL OUTPUT - Chassis Mount | | | |
| MDCC-0306 | ±12 VDC | ±1.25 | 30W |
| MDCC-0307 | ±15 VDC | ±1 | 30W |
| MDCC-0308 | +5/12 VDC | 3/1.25 | 30W |
| DUAL OUTPUT - DIN Rail Mount | | | |
| MDCC-0306/DRL | ±12 VDC | ±1.25 | 30W |
| MDCC-0307/DRL | ±15 VDC | ±1 | 30W |
| MDCC-0308/DRL | +5/12 VDC | 3/1.25 | 30W |
| TRIPLE OUTPUT - PCB Mount | | | |
| MTCA-0309 | +5,±12 VDC | 3,0.63/0.63 | 30W |
| MTCA-0311 | +5,±15 VDC | 3,0.5/0.5 | 30W |
| TRIPLE OUTPUT - Chassis Mount | | | |
| MTCC-0309 | +5,±12 VDC | 3,0.63/0.63 | 30W |
| MTCC-0311 | +5,±15 VDC | 3,0.5/0.5 | 30W |
| TRIPLE OUTPUT - DIN Rail Mount | | | |
| MTCC-0309/DRL | +5,±12 VDC | 3,0.63/0.63 | 30W |
| MTCC-0311/DRL | +5,±15 VDC | 3,0.5/0.5 | 30W |

30W Ultraminiature Modular Switching Power Supplies

MCA-30 series

INPUT SPECIFICATIONS

| | |
|------------------------------|----------------------------------|
| Input Voltage | 90-264VAC Nominal: 100-240VAC |
| Input Frequency | 47-440 Hz Nominal: 50-60Hz |
| Inrush Current (100V / 200V) | Cold Start, 20A / 40A, typ |
| Leakage Current | <3.5mA at 264Vin, 50Hz |

OUTPUT SPECIFICATIONS

| | |
|----------------------------|-------------------------------|
| Output Voltage/Current | See Specific Model |
| Initial Accuracy | ±1%, adjustable |
| Voltage Adjust | ±6%, typ |
| Load Regulation (20%-100%) | ±0.3%, typ |
| Line Regulation | ±0.3%, typ |
| Cross Regulation | ±3%, typ |
| Temperature Coefficient | ±0.03%/°C |
| Ripple/Noise(20Mhz BW) | 150mV Pk-Pk, typ |
| Overvoltage Protection | Clamp, 130-150% * |
| Hold Up Time | 30mS, typ |
| Short Circuit Protection | Continuous, self-recovering * |
| Current Limit | 130% typ, Self-Reset Foldback |

ENVIRONMENTAL SPECIFICATIONS

| | |
|---------------------------|---|
| Oper. Temperature | 0 to +50°C FL See Derate * (Free-air Convection) |
| Relative Humidity | 0-95%, Non-Condensing |
| Storage Temperature | -25 to +71°C * |
| MTBF, Single/Multi Output | 180,000 Hrs/110,000 Hrs Mil Std 217, 25C |

* 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.

PHYSICAL SPECIFICATIONS

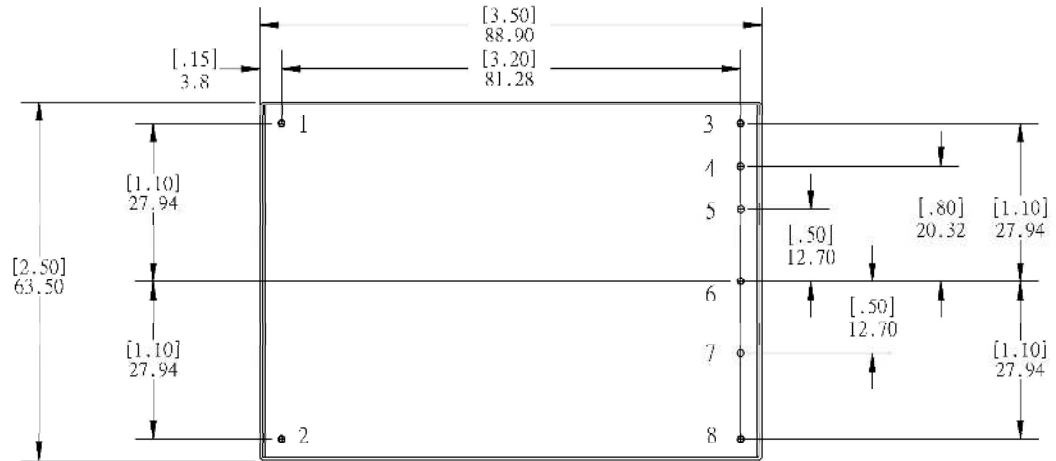
| | |
|----------------------|--|
| Case Material | Rynite, 94V-0 Rated |
| Construction | Encapsulated, Soft Pot |
| Size PCB Mount | Single O/P: 3.5" x 2.5" x 0.98" Multi O/P: 4.06" x 2.5" x 0.98" |
| Chassis Mount | Single O/P: 4.76" x 2.56" x 1.0" Multi O/P: 5.34" x 2.56" x 1.0" |
| Weight PCB / CHASSIS | Singles 10.4 oz (295g) / 13.4 oz (380g) Duals/Triples 12.1 oz (343g) / 15.4 oz (437g) |

GENERAL SPECIFICATIONS

| | |
|--------------------------|--|
| On/Off Control | Open Collector Logic "1"/Open=ON Logic "0"/GND=OFF |
| Input-Out Isolation | 3000VAC |
| Output-Ground Isolation | 1000VAC |
| Input-Ground Isolation | 2500VAC |
| Operating Frequency | 140 Khz, typ., fixed |
| Efficiency (@ Full Load) | 75 - 80%, typ (3.3V: 70% typ.) |
| Safety UL/cUL: | UL60950-1 2nd ed./ C22.2 60950-1 2nd ed. EN60601-1 3rd ed. |
| EMI | EN55011 Class B |

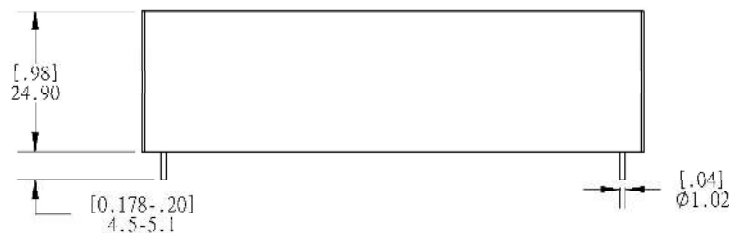
All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

MECHANICAL DIMENSIONS - PCB MOUNT - SINGLE OUTPUT

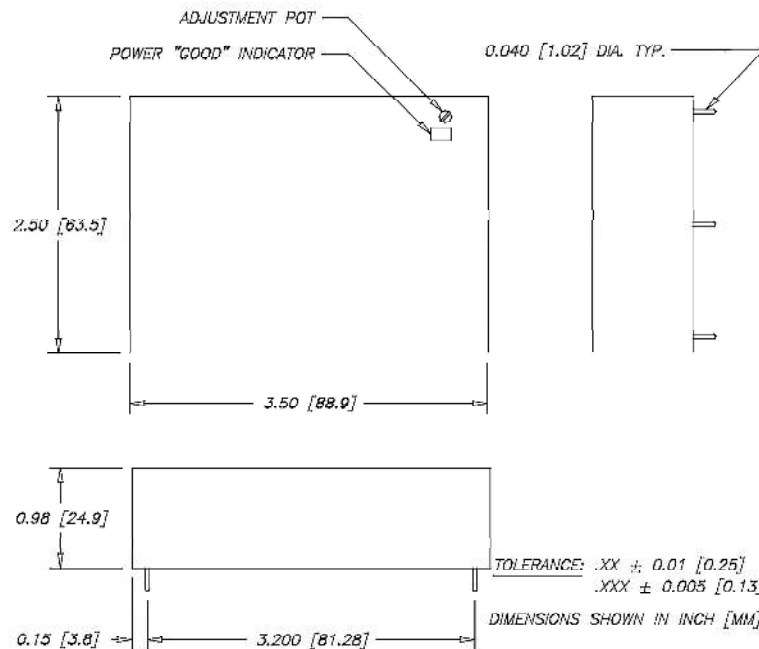


PIN - OUT VIEWED FROM BOTTOM

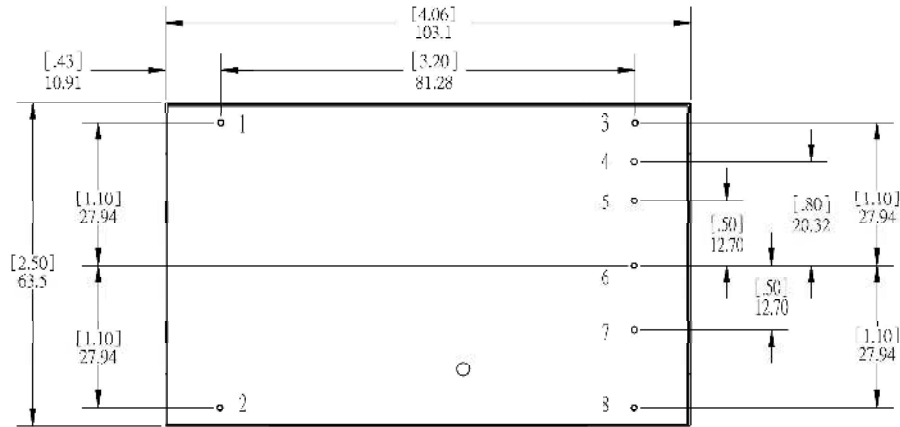
| Model Type/Pin# | Single |
|-----------------|--------|
| 1 | AC HI |
| 2 | AC LO |
| 3 | No Pin |
| 4 | No Pin |
| 5 | No Pin |
| 6 | -Vout |
| 7 | No Pin |
| 8 | +Vout |



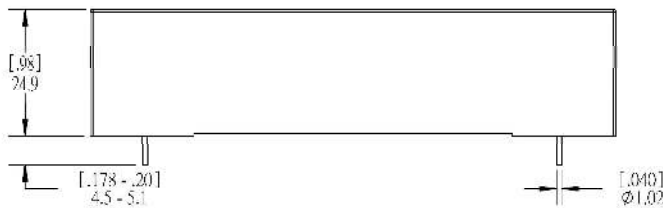
NOTES:
1. All dimension in mm [inch].
2. tolerance : .XX ± 0.254 [0.01],
.XXX ± 0.13 [0.005].



MECHANICAL DIMENSIONS - PCB MOUNT - DUAL & TRIPLE OUTPUT



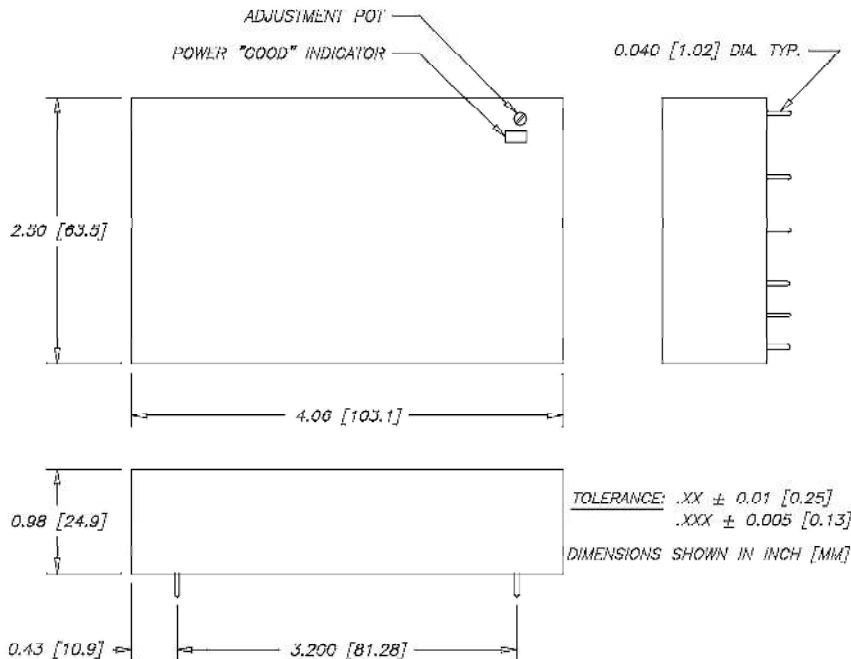
PIN-OUT VIEWED FROM BOTTOM



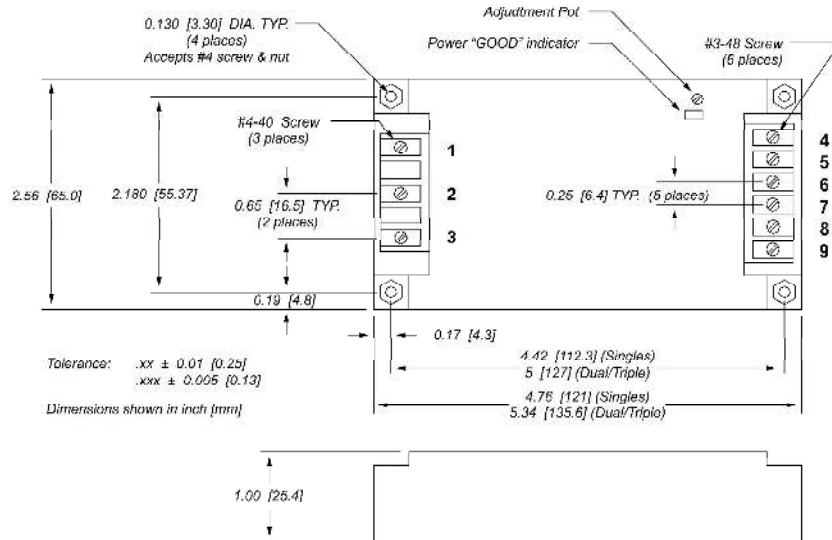
| Model Type/Pin# | Dual Matched | Dual (5/12V) | Triple |
|-----------------|--------------|--------------|--------|
| 1 | AC HI | AC HI | AC HI |
| 2 | AC LO | AC LO | AC LO |
| 3 | -Vout | COM | -Vout |
| 4 | No Pin | No Pin | No Pin |
| 5 | No Pin | No Pin | +5VRTN |
| 6 | COM | +5Vout | +/-COM |
| 7 | No Pin | No Pin | +5Vout |
| 8 | +Vout | +12Vout | -Vout |

NOTES :

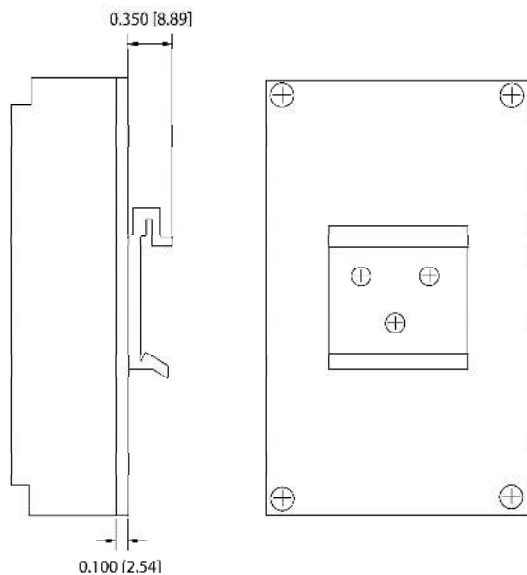
1. All dimension in mm [inch].
2. tolerance : .XX±0.254 [0.01] ,
.XXX±0.13[0.005].



MECHANICAL DIMENSIONS - CHASSIS MOUNT



MECHANICAL DIMENSIONS - DIN RAIL



| Model Type / Pin# | Single | Match Dual | Unmatch Dual | Triple |
|-------------------|--------|------------|--------------|---------|
| 1 | AC LO | AC LO | AC LO | AC LO |
| 2 | GND | GND | GND | GND |
| 3 | AC HI | AC HI | AC HI | AC HI |
| 4 | +Vout | +Vout | +12Vout | +Vout |
| 5 | +Vout | Com | +5Vout | +5Vout |
| 6 | -Vout | Com | +5Vout | ± Com |
| 7 | -Vout | -Vout | Com | +5V Ret |
| 8 | N/C | N/C | Com | -Vout |
| 9 | Ctrl | Ctrl | Ctrl | Ctrl |

DIN Rail mounting kit available for Chassis-mount modules.
 - For 30 watt single outputs specify part # M-DRL-30S
 - For 30 watt dual/single outputs specify part # M-DRL-30T
 Kit includes mounting plate, DIN Rail clip and assembly hardware.

PERFORMANCE CURVES

