

MVLT40 Series

Medical 40 Watt AC/DC Power Supplies

Low profile in a 4.0"x2.0"x1.07" package and over 82% efficient the EOS MVLT40 medical power supply family comes in single and triple DC output configurations. The low leakage current MVLT40 offers a full 40 watts output power with convection cooling and more with optional air flow. A cover kit is available for easy drop in design and manufacturability.

This industry and designer's favorite is used to power a variety of medical applications to include endoscopy systems and video, pumps/drips, test and lab gear, sleep disorder, If space is a premium and thermal management integral to your design we suggest the MVLT40 as the optimum solution. The MVLT40 family is RoHs compliant and our factory is ISO 14001 environmentally approved. Worldwide medical safety standards apply and the power supply is fitted with OVP and OCP standard features. Applications include:

- Endoscopy equipment
- Pumps, IVs and drips
- Laboratory gear
- Fluid analyzers
- Respiratory systems
- Diagnostic systems



Features :

- > Low leakage current <250 μ A
- > EN55022-B, CISPR22-B FCC Part 15 Level B
- > Small 4.0"x2.0"x1.07 inch package
- > Ultra high efficiency >82%
- > NEMKO, UL, and CSA approvals to IEC60601
- > Cover Kit accessory available.

| Model Number | Output | Voltage / Current * | Voltage Set Point | Min. Load |
|--------------|---------------------------|---------------------|-------------------|-----------|
| MVLT40-1200 | V1 | 5V@ 8.0A | 5. 1V | 0. 2A |
| MVLT40-1201 | V1 | 12V@ 3.5A | 12V | 0. 1A |
| MVLT40-1202 | V1 | 15V@ 2.7A | 15V | 0. 1A |
| MVLT40-1203 | V1 | 24V@ 1.7A | 24V | 0. 05A |
| MVLT40-1204 | V1 | 48V@ 0.83A | 48V | 0.05A |
| MVLT40-3200 | V1 | 5V@6.0A | 5. 2V | 0. 5A |
| | V2 | 12V@2.0A | 12. 5V | 0. 1A |
| | V3 | -12V@0.5A | -12. 8V | 0. 0A |
| MVLT40-3201 | V1 | 5V@6.0A | 5. 2V | 0. 5A |
| | V2 | 24V@1.0A | 24V | 0. 1A |
| | V3 | -12V@0.5A | -12. 8V | 0. 0A |
| MVLT40-3202 | V1 | 5V@6.0A | 5. 2V | 0. 5A |
| | V2 | 15V@1.5A | 14. 6V | 0. 1A |
| | V3 | -15V@0.5A | -14. 8V | 0. 0A |
| MVLT40-3203 | V1 | 3.3V@6.0A | 3. 3V | 0. 1A |
| | V2 | 5V@3.0A | 5. 2V | 0. 1A |
| | V3 | -12V@0.5A | -12. 8V | 0. 0A |
| VLT60CK | Metal cover kit accessory | | | |

* Maximum current per output channel. Do not exceed total output power rating

| INPUT SPECIFICATION | | |
|---------------------|-----------------------------|---------------------------|
| AC Input | Auto-ranging | 90 to 132V 180 to 264V |
| Efficiency Typical | MVLT40-3203 Other Models | 75% 82% |
| Input Frequency | | 47-63 Hz |
| Input Current | Full Load at low line | 1.1Arms , max |
| Inrush Current | High Line , cold start | 75A, max |
| Leakage Current | | <250 μ A |

| OUTPUT SPECIFICATIONS | | |
|--------------------------------|--|--|
| Output Power | | 40W max |
| Voltage Set Point | | See table |
| Hold-Up Time | 115V/230V | 6ms./15ms |
| Voltage Set Point Accuracy | V1 V2 and V3 | \pm 3% \pm 5% |
| Line Regulation | Low line to high line | \pm 0.3% |
| Load Regulation | Min to 50% & 50% to Max load V1 V2 and V3 | \pm 0.5% \pm 5% |
| Transient Response | 50% to full load Voltage Deviation Recovery Time | 10%, max <5 ms |
| OVP (For 3 o/p models only) | V1 only 3.3 V V1 only 5V | 3.95V, \pm 0.25V 6.2V, \pm 0.4V |
| Overload Protection | Primary limited | Yes, 130% |
| Short Circuit Protection | Auto recovery <6s | Short Term |
| Ripple and Noise | 3.3V and 5V Other voltages | 50mV 1% |
| Output Rise Time | All outputs | <100ms |

All EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at www.eospower.com. EOS brand power supplies and patents are owned exclusively by EOS Power. All Rights Reserved.



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| MECHANICAL SPECIFICATION | |
|--------------------------|--|
| AC Input Connector J1 | Molex 3 position, 0.156 center Header 26-60-4030 or equivalent |
| Ground Connector | Spade connector |
| DC Output connector J2 | Molex 6 position, 0.156 center Header 26-60-4060 or equivalent |
| Size | 4.0 "X 2.0" x 1.07" 101.6 x 50.8 x 27.18 mm |
| Weight | 5oz (150g) |

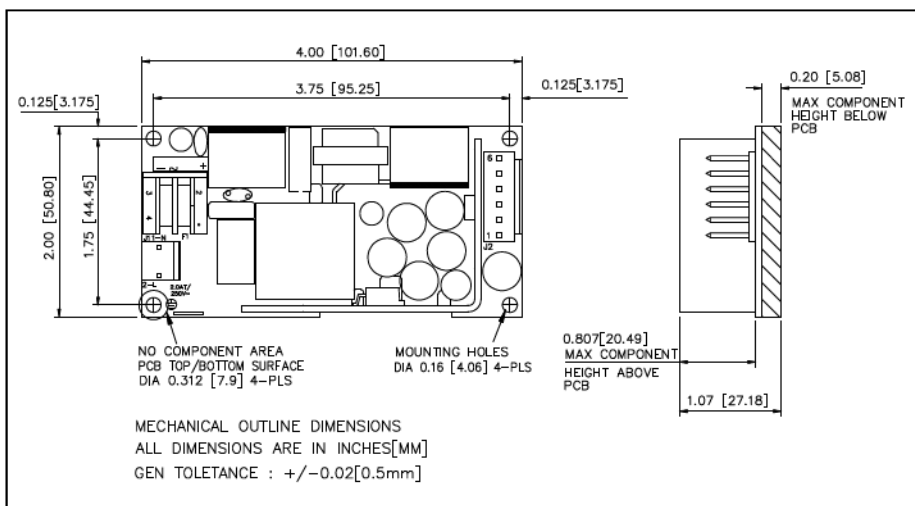
| INPUT SPADE CONNECTOR | |
|-----------------------|-----------|
| GND | AC Ground |

| INPUT CONNECTOR J1 | |
|--------------------|------------|
| Pin1 | AC Neutral |
| Pin2 | AC Line |

| ENVIRONMENTAL SPECIFICATION | | |
|-----------------------------|-------------------------------------|---------------------------|
| Operating Temperature | No derating Linear derate to 50% | 0 to 50° C 51 to 70° C |
| Storage Temperature | | -40 to 70° CC |
| Cooling | | Convection |
| Relative humidity | Non condensing | 95%, max |
| MTBF | MIL - HDBK-217F | > 100,000 hrs |

| EMC AND SAFETY SPECIFICATIONS | |
|-------------------------------|--|
| CE Mark | Complies with the LVD |
| EMC | EN5022-B, CISPR22-B, FCC Part 15 Class B, EN50082-1 EN60601-1-2ND ED |
| Agency Approval | VDE , UL, c-UL |
| Safety Standard | IEC60601-1, EN60601-1-1, UL60601-1, CSA C22.2 No 601 Class 1 SELV. |
| Safety file number | NEMKO:P06206742 UL: E173812 |
| Isolation Voltage | 4000 VAC |

| OUTPUT CONNECTOR J2 | | |
|---------------------|---------------|---------------|
| | Single Output | Triple Output |
| Pin1 | V1 | V1 |
| Pin2 | V1 | V1 |
| Pin3 | Common | Common |
| Pin4 | Common | Common |
| Pin5 | NC | V3 |
| Pin6 | NC | V2 |



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