



40 WATT SINGLE/DUAL/TRIPLE OUTPUT

Regulated, 2:1 Input Range DC/DC Converters



FEATURES

- **500 Vdc Min. Input/Output Isolation**
- **Efficiency to 86% @ FL**
- **100KHz Min. Switching Frequency**
- **Short Circuit Protection**
- **6-Sided Shielding Available**
- **Compact Size**
- **Epoxy Encapsulated**

KW40 Series

Specifications

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

INPUT

| | |
|---------------------|---------------|
| Input Voltages..... | Voltage Range |
| 12 Vdc..... | 9-18Vdc |
| 24 Vdc..... | 18-36 Vdc |
| 48 Vdc..... | 36-72 Vdc |

OUTPUT

| | |
|--|----------------|
| Voltage Accuracy..... | ±1.0% |
| Line Regulation | ±0.1% |
| Load Regulation..... | ±0.5% |
| Ripple Noise (20 MHz BW)..... | 50mV p-p max. |
| Temperature Coefficient (at FL)..... | ±0.02%/°C max. |
| Transient Response, 25% load step..... | < 250ms |

GENERAL

| | |
|---------------------------|------------------------------|
| Efficiency..... | 86% max. @ FL |
| Isolation Voltage..... | 500 Vdc min. |
| | Up to 3000 Vdc min. Optional |
| Isolation Resistance..... | 100MOhms |
| Switching Frequency..... | 100KHz typ. |
| Protection..... | Over Current Protection |
| | Short Circuit Protection |

ENVIRONMENTAL

| | |
|----------------------------------|-----------------------------|
| Operating Temperature Range..... | -25 to +71°C |
| Storage Temperature Range..... | -50 to +105°C |
| Cooling..... | Free Air Convection |
| EMI/RFI..... | Five-Sided Shield |
| | Six-Sided Shield (optional) |

PHYSICAL

| | |
|-----------------|--------------------------|
| Dimensions..... | 3.94" x 2.76" x 1.35" |
| | (100.0 x 70.0 x 34.4 mm) |

Selection Guide

(Continued)

| | Input Voltage Nominal (Range) (Vdc) | Output Voltage (Vdc) | Output Current (mA) | Model Number | Case | |
|------------------------------|---|----------------------------|------------------------|--------------|------|--|
| SINGLE OUTPUT VOLTAGE | 12 (9-18) | 5 | 8000 | KW40-12S5 | K | |
| | | 12 | 3400 | KW40-12S12 | K | |
| | | 15 | 2700 | KW40-12S15 | K | |
| | 24 (18-36) | 5 | 8000 | KW40-24S5 | K | |
| | | 12 | 3400 | KW40-24S12 | K | |
| | | 15 | 2700 | KW40-24S15 | K | |
| | 48 (36-72) | 5 | 8000 | KW40-48S5 | K | |
| | | 12 | 3400 | KW40-48S12 | K | |
| | | 15 | 2700 | KW40-48S15 | K | |
| DUAL OUTPUTS | 12 (9-18) | ±5 | ±4000 | KW40-12-5 | K | |
| | | ±12 | ±1670 | KW40-12-12 | K | |
| | | ±15 | ±1340 | KW40-12-15 | K | |
| | 24 (18-36) | ±5 | ±4000 | KW40-24-5 | K | |
| | | ±12 | ±1670 | KW40-24-12 | K | |
| | | ±15 | ±1340 | KW40-24-15 | K | |
| | 48 (36-72) | ±5 | ±4000 | KW40-48-5 | K | |
| | | ±12 | ±1670 | KW40-48-12 | K | |
| | | ±15 | ±1340 | KW40-48-15 | K | |
| TRIPLE OUTPUTS | 12 (9-18) | 5 / ±12 | 7000 / ±300 | KW40-12S5-12 | K | |
| | | 5 / ±15 | 6200 / ±300 | KW40-12S5-15 | K | |
| | | +5 / -5 / 12 | +7000 / -300 / 300 | KW40-12S12-5 | K | |
| | 24 (18-36) | 5 / ±12 | 7000 / ±300 | KW40-24S5-12 | K | |
| | | 5 / ±15 | 6200 / ±300 | KW40-24S5-15 | K | |
| | | +5 / -5 / 12 | +7000 / -300 / 300 | KW40-24S12-5 | K | |
| | 48 (36-72) | 5 / ±12 | 7000 / ±300 | KW40-48S5-12 | K | |
| | | 5 / ±15 | 6200 / ±300 | KW40-48S5-15 | K | |
| | | +5 / -5 / 12 | +7000 / -300 / 300 | KW40-48S12-5 | K | |

See next page for mechanical specifications.

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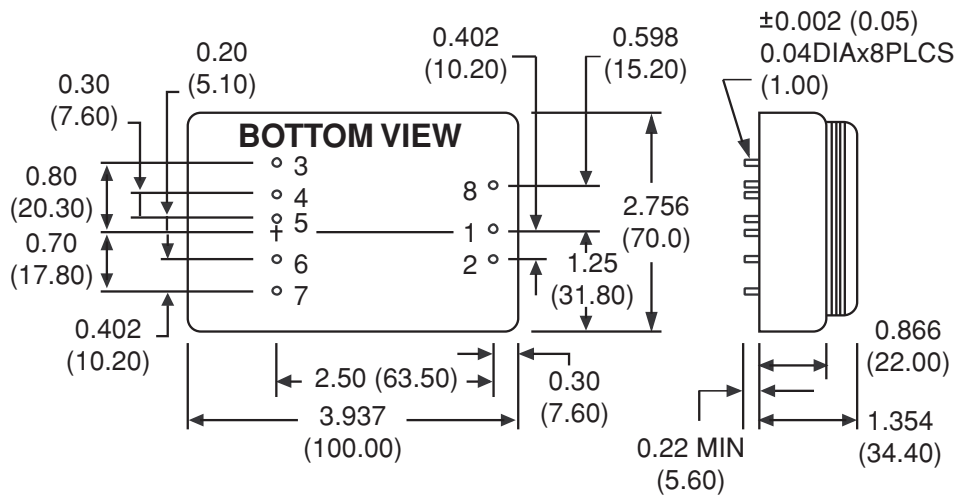
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Mechanical Specifications

| I/O Connections | | | |
|-----------------|-------------|----------|----------|
| Pin | SINGLE | DUAL | TRIPLE * |
| 1 | +Vin | +Vin | +Vin |
| 2 | -Vin | -Vin | -Vin |
| 3 | +Trim Down | -Vout V2 | +Vout V2 |
| 4 | Output Trim | Com2 | Com2 |
| 5 | -Trim Up | N/C | -Vout V3 |
| 6 | +Vout | +Vout V1 | +5 Vdc |
| 7 | -Vout | Com1 | Com1 |
| 8 | On/Off | On/Off | On/Off |

* For $\pm 5\text{Vdc}/12\text{Vdc}$ Triple Voltage Units
 V2 = -5Vdc, V3 = +12Vdc

CASE K



All Dimensions are in Inches (mm).



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