

## Isolated and Regulated 5 WATT Modular DC/DC Converters

## FKC05 series

### INPUT SPECIFICATIONS

|                       |                |           |
|-----------------------|----------------|-----------|
| Input Voltage Ranges: | 12 VDC Nominal | 9-18 VDC  |
|                       | 24 VDC Nominal | 18-36 VDC |
|                       | 48 VDC Nominal | 36-75 VDC |

### OUTPUT SPECIFICATIONS

|                                 |                            |
|---------------------------------|----------------------------|
| Voltage and Current             | See Selection Chart        |
| Load Regulation (singles/duals) | +/- 0.2% / +/- 1% (25%-FL) |
| Line Regulation                 | +/- 0.2% (singles/duals)   |
| Temperature Coefficient         | +/-0.02%/DegC              |
| Ripple/Noise(Single/Dual)       | 50mV Pk-Pk, typ            |
| Voltage Accuracy                | +/- 2%, typ                |
| Voltage Balance, Dual Outputs   | +/- 2%, typ                |
| Short Circuit Protection        | Continuous                 |

### GENERAL SPECIFICATIONS

|                      |                     |          |
|----------------------|---------------------|----------|
| Input-Out Isolation  | 500VDC              |          |
| Isolation Resistance | 10000 M Ohms        |          |
| In/Out Capacitance   | 300 pF              |          |
| Efficiency           | FKC05-XXS(D)05      | 78%, typ |
|                      | FKC05-XXS15,D12,D15 | 81%, typ |
|                      | FKC05-XXS12         | 82%, typ |
| Switching Frequency  | 300Khz              |          |

### ENVIRONMENTAL SPECIFICATIONS

|                     |                           |
|---------------------|---------------------------|
| Oper. Temperature   | -25 to +71 DegC(FL)       |
| Storage Temperature | -55 to +105 DegC *        |
| Maximum Case Temp   | 100 DegC *                |
| MTBF                | 3.165 Million Hrs         |
|                     | MIL-HDBK-217F TA=25C (FL) |

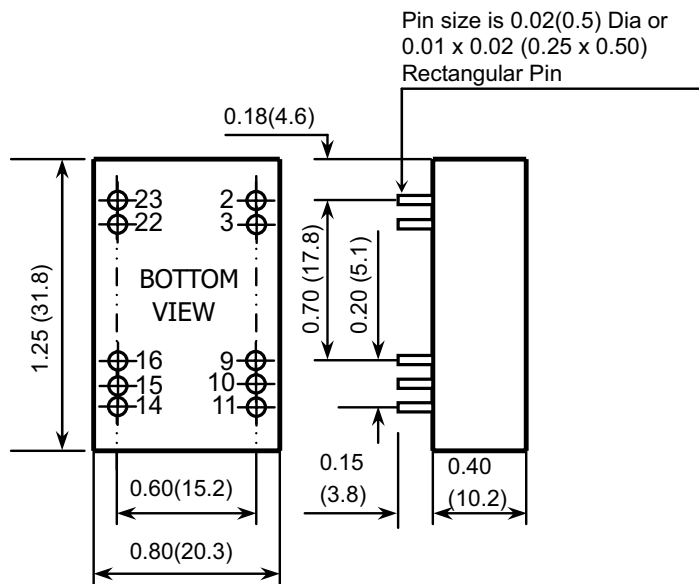
### PHYSICAL SPECIFICATIONS

|                     |                          |
|---------------------|--------------------------|
| Case Material MKC03 | Nickel-Coated Copper     |
|                     | with Non-Conductive Base |
| Construction        | Fully Encapsulated       |
| Weight              | 0.6 oz, (14g)            |

*All specifications are typical at nominal input, full load, and 25DegC 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.

## MECHANICAL DIMENSIONS



| Pin # | Single Outputs | Dual Outputs |
|-------|----------------|--------------|
| 2     | - Input        | - Input      |
| 3     | - Input        | - Input      |
| 9     | NC             | Common       |
| 10    | NC             | NC           |
| 11    | NC             | - Output     |
| 14    | + Output       | + Output     |
| 15    | NC             | NC           |
| 16    | - Output       | Common       |
| 22    | + Input        | + Input      |
| 23    | + Input        | + Input      |

## OUTPUT DERATING CURVE

