

5 Watt Low-Noise DC-DC Converters/ *DCE Single and Dual Output*



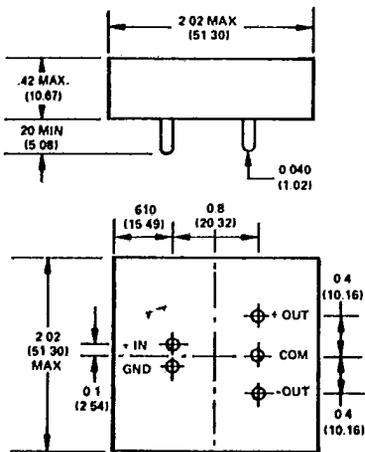
SINGLE
 INPUT: 5, 12, 24, 28, 48 VDC
 OUTPUT: 5, 12, 15 VDC

DUAL
 INPUT: 5, 12, 24, 28, 48 VDC
 OUTPUT: ± 12, ± 15 VDC

- Small 2" Square Package
- Short Circuit Protection 130% of Rated Load
- High Input/Output Isolation
- Excellent Regulation
- 6-Sided Continuous Shielding

These self-contained converters provide solutions to floating power requirements in analog and digital applications where low ripple and noise are important.

Due to high isolation resistance, all outputs are floating, and may be referenced either positive or negative, or series-stacked for higher output voltage.



BOTTOM VIEW
 Dimensions in inches (mm)

SINGLE OUTPUTS

Specifications Typical at +25°C

MODELS

| DCE | 5/5S/1000 5/12S/450 5/15S/350 | 12/5S/1000 12/12S/500 12/15S/350 | 24/5S/1000 24/12S/500 24/15S/350 | 28/5S/1000 28/12S/500 28/15S/350 | 48/5S/1000 48/12S/500 48/15S/350 |
|--|---|--|--|--|--|
| Input Voltage Tolerance | 5, ± .25VDC | 12, ± .8VDC | 24, +2.4VDC -1.7VDC | 28, +2.8VDC -2VDC | 48, +4.8VDC -3.4VDC |
| Input Current No Load Full Load | 170mA 1500mA | 50mA 650mA | 30mA 330mA | 20mA 300mA | 20mA 175mA |
| Input/Output Isolation | 500 VDC 10 ⁹ Ω 100pF | | | | |
| Output Voltage/Current | + 5 VDC @ 1000 mA + 12 VDC @ 500 mA + 15 VDC @ 350 mA | | | | |
| Output Voltage Tolerance | ± 1% | | | | |
| Output Ripple | 1mV rms | | | | |
| Reflected Input Ripple Current (mA p-p) | 35 | 30 | 30 | 25 | 15 |
| Regulation Line/Load vs. Temperature | .1%/1% .02%/°C | | | | |
| Efficiency | 70% | | | | |
| Temperature Range Operating Storage | -25°C to + 71°C -40°C to + 100°C | | | | |
| Case Material | Metal | | | | |
| Mating Socket | S102 | | | | |
| Weight | 3.5 oz. | | | | |

Note: Single available in Package "A" only with Common Pin removed.

DUAL OUTPUTS

Specifications Typical at +25°C

MODELS

| DCE | 5/12/150 5/15/150 | 12/12/150 12/15/150 | 24/12/150 24/15/150 | 28/12/150 28/15/150 | 48/12/150 48/15/150 |
|--|--|------------------------|------------------------|------------------------|------------------------|
| Input Voltage Tolerance | 5, ± .25VDC | 12, ± .8VDC | 24, +2.4VDC -1.7VDC | 28, +2.8VDC -2VDC | 48, +4.8VDC -3.4VDC |
| Input Current No Load Full Load | 150mA 1600mA | 50mA 680mA | 25mA 315mA | 20mA 280mA | 10mA 175mA |
| Input/Output Isolation | 500 VDC 10 ⁹ Ω 100pF | | | | |
| Output Voltage/Current | ± 12 VDC @ ± 150 mA ± 15 VDC @ ± 150 mA | | | | |
| Output Voltage Tolerance Balance | ± 1% ± 0.5% | | | | |
| Output Ripple | 1mV rms | | | | |
| Reflected Input Ripple Current (mA p-p) | 40 | 20 | 20 | 20 | 10 |
| Regulation Line/Load vs. Temperature | .02%/1% .02%/°C | | | | |
| Efficiency | 70% | | | | |
| Temperature Range Operating Storage | -25°C to 71°C -40°C to 100°C | | | | |
| Case Material | Metal | | | | |
| Mating Socket | S121 | | | | |
| Weight | 3.5 oz. | | | | |

Option A: Conventional 5-pin (0.40 dia.) termination (Use S102 Socket)