

Series M and N μ POWER™ 2.5 Watts 24-Lead DIP

High Efficiency Unregulated DC-DC Converters

Features

- Thick-film hybrid circuit
- Surface mount technology
- Up to 2.5 watts output power
- High power density
- Excellent efficiency
- 24-lead DIP compatible package
- High input/output isolation
- Short circuit protection
- Low output ripple & noise
- Single or dual outputs
- High MTBF
- 100% burned-in and tested
- Metal case shielding
- Vacuum encapsulated potting

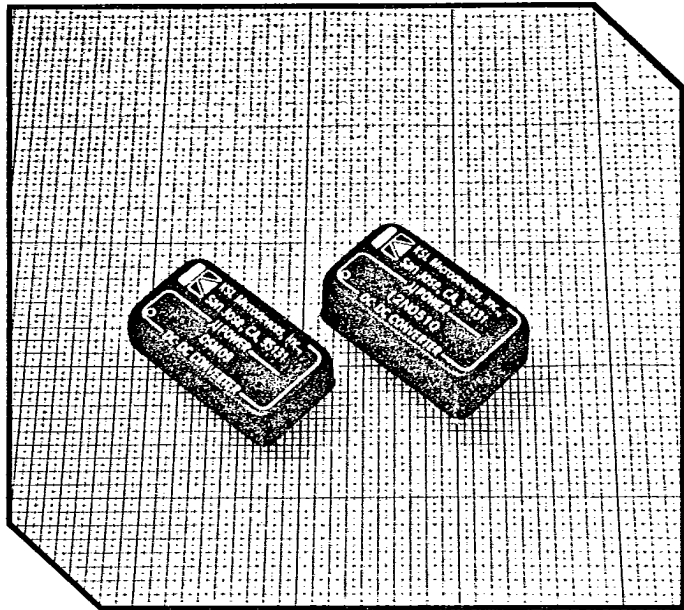
General Specifications

- Input Voltage Range: $\pm 1.5\%$ at nominal
- Output Voltage Tolerance: $\pm 3\%$ at nominal
- Input Reflected Ripple: 1% of V_{in} max.
- Line Regulation: 1.1%/1% V_{in}
- Load Regulation: $\pm 10\%$ (10% to 100% load)
- Output Ripple & Noise: 50mV p-p
- Input/Output Isolation: 150M Ω 500VDC min.
- Short Circuit Protection: current limiting
- Efficiency: 80% @ nominal voltage
- Transient Response: Less than 10 μ sec.
- MTBF: 500,000 hours
- Operating Temperature: -25°C to +70°C
- Storage Temperature: -55°C to +70°C
- Temperature Coefficient: 100ppm/°C
- Burn-In: 70°C for 4 hours and tested
- Long Term Stability: 0.4%/khours

Special Options

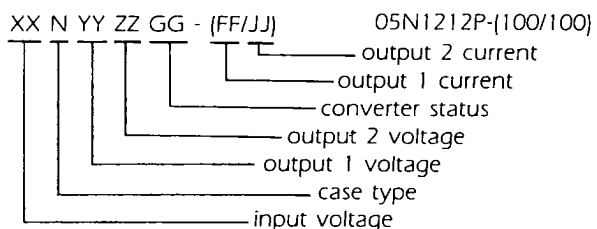
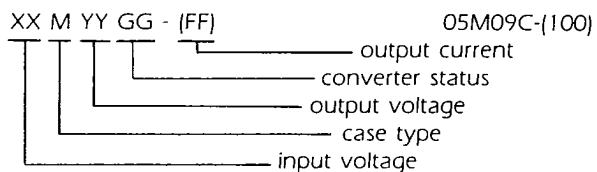
- Case: EMI/RF Continuous Shielding Package
Six-sided enclosure grounded
- Stabilization Bake: MIL-STD-883B, method 1008.2
24 hours at +125°C
- Burn-In: MIL-STD-883B, method 1015.4
96 hours at +70°C case temperature
- Temperature Cycle: MIL-STD-883B, method 1010.5
-55°C/+125°C 10 cycles minimum
- Thermal Shock: MIL-STD-883B, method 1011.4
-55°C/5 minutes, +125°C/5 minutes

*Specifications subject to change without notice



Part Number — Custom Designs

KSL μ POWER converters are used in a wide variety of special custom design applications where alternate voltages, currents, pin-outs or multiple outputs are required.



Converter Status

U: Unregulated	S: Special specs
R: Regulated	J: Hi-Rel screened
C: Custom circuit	T: Triple outputs
P: Special pin-outs	Q: Quad outputs

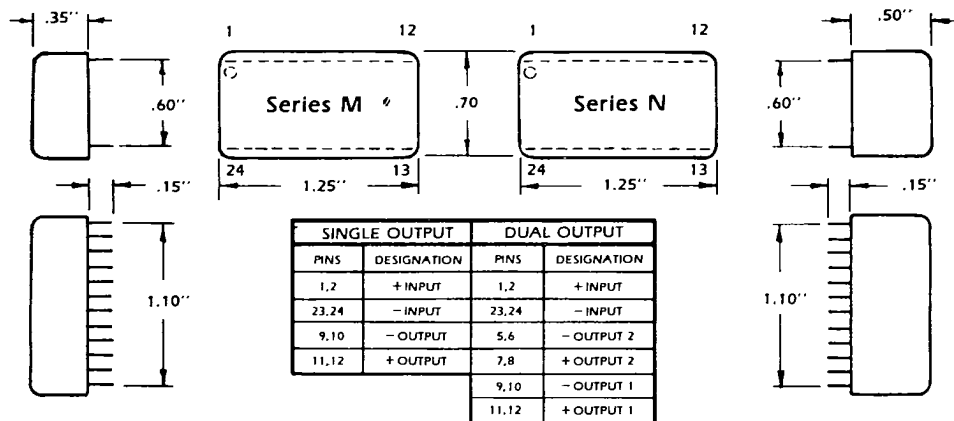
Applications

- Ethernet/CheaperNet LAN
- Data Communications
- Video Graphics Terminals
- Field Test Equipment
- Airborne Electronics



MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	LOAD CURRENT	MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	LOAD CURRENT
05M05	+/-5V	+/- 5V	500 mA	05N0505	+/-5V	± 5V	± 250 mA
05M09	+/-5V	+/- 9V	270 mA	05N0909	+/-5V	± 9V	± 130 mA
05M12	+/-5V	+/-12V	200 mA	05N1212	+/-5V	± 12V	± 100 mA
05M15	+/-5V	+/-15V	160 mA	05N1515	+/-5V	± 15V	± 80 mA
05M24	+/-5V	+/-24V	100 mA	05N2424	+/-5V	± 24V	± 50 mA
05M48	+/-5V	+/-48V	50 mA	05N4848	+/-5V	± 48V	± 25 mA
12M05	+/-12V	+/- 5V	500 mA	12N0505	+/-12V	± 5V	± 250 mA
12M09	+/-12V	+/- 9V	270 mA	12N0909	+/-12V	± 9V	± 130 mA
12M12	+/-12V	+/-12V	200 mA	12N1212	+/-12V	± 12V	± 100 mA
12M15	+/-12V	+/-15V	160 mA	12N1515	+/-12V	± 15V	± 80 mA
12M24	+/-12V	+/-24V	100 mA	12N2424	+/-12V	± 24V	± 50 mA
12M48	+/-12V	+/-48V	50 mA	12N4848	+/-12V	± 48V	± 25 mA
15M05	+/-15V	+/- 5V	500 mA	15N0505	+/-15V	± 5V	± 250 mA
15M09	+/-15V	+/- 9V	270 mA	15N0909	+/-15V	± 9V	± 130 mA
15M12	+/-15V	+/-12V	200 mA	15N1212	+/-15V	± 12V	± 100 mA
15M15	+/-15V	+/-15V	160 mA	15N1515	+/-15V	± 15V	± 80 mA
15M24	+/-15V	+/-24V	100 mA	15N2424	+/-15V	± 24V	± 50 mA
15M48	+/-15V	+/-48V	50 mA	15N4848	+/-15V	± 48V	± 25 mA
24M05	+/-24V	+/- 5V	500 mA	24N0505	+/-24V	± 5V	± 250 mA
24M09	+/-24V	+/- 9V	270 mA	24N0909	+/-24V	± 9V	± 130 mA
24M12	+/-24V	+/-12V	200 mA	24N1212	+/-24V	± 12V	± 100 mA
24M15	+/-24V	+/-15V	160 mA	24N1515	+/-24V	± 15V	± 80 mA
24M24	+/-24V	+/-24V	100 mA	24N2424	+/-24V	± 24V	± 50 mA
24M48	+/-24V	+/-48V	50 mA	24N4848	+/-24V	± 48V	± 25 mA
48M05	+/-48V	+/- 5V	500 mA	48N0505	+/-48V	± 5V	± 250 mA
48M09	+/-48V	+/- 9V	270 mA	48N0909	+/-48V	± 9V	± 130 mA
48M12	+/-48V	+/-12V	200 mA	48N1212	+/-48V	± 12V	± 100 mA
48M15	+/-48V	+/-15V	160 mA	48N1515	+/-48V	± 15V	± 80 mA
48M24	+/-48V	+/-24V	100 mA	48N2424	+/-48V	± 24V	± 50 mA
48M48	+/-48V	+/-48V	50 mA	48N4848	+/-48V	± 48V	± 25 mA

BOTTOM VIEW

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