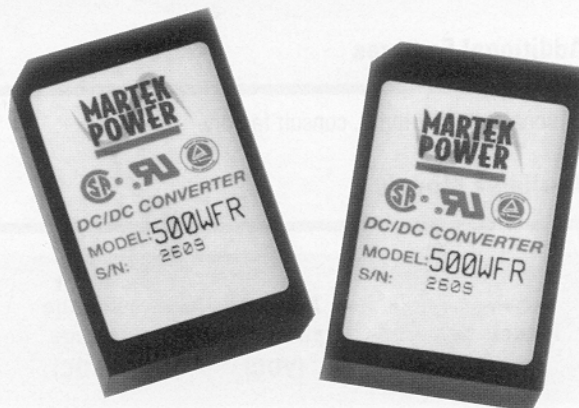


# 500WFR series

3 to 5 watts



## Key Features:

- **Single & Dual Output Models**
- **2:1 Input Voltage range**
- **Low Profile, 24 pin DIP package**
- **Industry Standard Pinout**

## Ideally Suited For:

- **Telecom equipment**
- **Mixed analog/digital subsystems**
- **Data Communications**

## Input Characteristics

Input Voltage Range:	9-18, 18-36, 36-72 VDC
Input Filtering:	Pi Filter
Efficiency:	See Available Models Chart
No Load Input Current:	See Available Models Chart

## Output Characteristics

Output Voltage Accuracy:	+/-2% Max.
Output Voltage Balance:	+/-1% Max, Dual Output Models (Equal loads)
Minimum Load Requirements:	10% Min Load
Line Regulation:	+/-0.5%, Max (Singles & Duals)
Load Regulation:	Singles: +/-0.5%, Max (10% to FL) Duals: +/-1% Max. (25% to FL)
Ripple and Noise:	100mV or 1% pk-pk Max., 20MHz Bandwidth
Temperature Coefficient:	+/-0.05%/°C
Short Circuit Protection:	Continuous; Auto-recovery

## Environmental Characteristics

Operating Temperature Range:	-25°C to +85°C, derate 3.5%/°C above 71°C
Storage Temperature Range:	-40°C to +125°C
Maximum Case Temperature:	95°C
Humidity:	Up to 95%, Non-condensing
Cooling:	Free-air Convection
Reliability (MTBF per Mil-HDBK-217):	>900,000 hours, +25°C, Ground Benign

## General Characteristics

Switching Frequency:	100kHz, Min.
Isolation Voltage (Input to Output):	500VDC, (1 minute); (Consult factory for 1500VDC option)
Isolation Resistance:	10 <sup>9</sup> Ohms
Isolation Capacitance:	150pF, Max.
Weight:	0.50 oz (14g)
Case Material:	Non-conductive black plastic
Flammability:	UL 94-V0 (Materials)

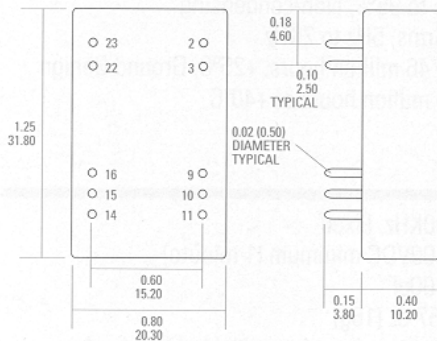
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### Available Models

Model	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Output Voltage (VDC)	Max. Output Current (mA)	Efficiency @ Full-Load (%)	Input Current No-Load (mA) typ.
503S12WFR	12	9-18	3.3	1000	70	7.5
505S12WFR	12	9-18	5.0	1000	76	7.5
512S12WFR	12	9-18	12.0	470	80	7.5
515S12WFR	12	9-18	15.0	400	80	7.5
505D12WFR	12	9-18	+/-5.0	+/-500	70	12
512D12WFR	12	9-18	+/-12.0	+/-230	80	12
515D12WFR	12	9-18	+/-15.0	+/-190	80	12
503S24WFR	24	18-36	3.3	1000	70	7.5
505S24WFR	24	18-36	5.0	1000	78	5
512S24WFR	24	18-36	12.0	470	82	5
515S24WFR	24	18-36	15.0	400	82	5
505D24WFR	24	18-36	+/-5.0	+/-500	78	12
512D24WFR	24	18-36	+/-12.0	+/-230	81	7.5
515D24WFR	24	18-36	+/-15.0	+/-190	81	7.5
503S48WFR	48	36-72	3.3	1000	70	7.5
505S48WFR	48	36-72	5.0	1000	78	2
512S48WFR	48	36-72	12.0	470	81	2
515S48WFR	48	36-72	15.0	400	81	2
505D48WFR	48	36-72	+/-5.0	+/-500	78	7.5
512D48WFR	48	36-72	+/-12.0	+/-230	81	3
515D48WFR	48	36-72	+/-15.0	+/-190	81	3

### Outline Drawing



### Pinout Chart

Pin	Single	Dual
2	-Vin	-Vin
3	-Vin	-Vin
9	NC	Common
10	NC	NC
11	NC	- Vout
14	+Vout	+Vout
15	NC	NC
16	-Vout	Common
22	+Vin	+Vin
23	+Vin	+Vin

NC : No Connection with Pin

All specifications are typical at 25 degrees C with nominal input voltage and full output unless otherwise noted. Specifications are subject to change without notice. All dimensions are typical.