



FEATURES

- 4V to 16V Input Voltage
- 25A Load Current
- 0.6V to 5V Output Voltage
- Multiphase Operation for Up to 250A
- Over Temperature Protection
- Over Current Protection
- Over/Under Voltage Protection

ORDERING INFORMATION

| Part Number | Input Voltage (V) | Output Voltage (V) | Output Current (A) | Efficiency |
|-----------------|-------------------|--------------------|--------------------|------------|
| mEZD81225A-0001 | 4-16 | 1.2 | 25 | Up to 90% |
| mEZD81225A-xxxx | 4-16 | Customizable | 25 | Up to 90% |

Power Derating

$V_{IN} = 12V$, $V_{OUT} = 1V$

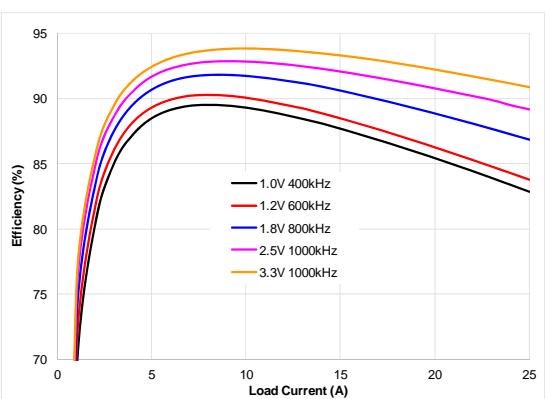
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mEZD812XX FAMILY PRODUCTS

| Part Number | Input Voltage (V) | Output Voltage (V) | Output Current (A) |
|-------------|-------------------|--------------------|------------------------|
| mEZD81225A | 4-16 | 0.6-5 | 25 |
| mEZD81260A | 5-16 | 0.5-6.5 | Dual 30A or Single 60A |

Efficiency vs. Load Current

$V_{IN} = 12V$



ELECTRICAL CHARACTERISTICS

| | | |
|-----------------------------|---|------------------------|
| Input Voltage Range | V_{IN} Continuous | 4 to 16V |
| Output Voltage Set Accuracy | | $\pm 0.5\%$ (typ) |
| Output Voltage Ripple | $V_{IN} = 12V$, $V_{OUT} = 1V$, full load | 18.8mVpp |
| Line Regulation | V_{IN} from MIN to MAX, $V_{OUT} = 1V$ | $\pm 0.5\%$ (typ) |
| Load Regulation | I_{OUT} from MIN to MAX, $V_{OUT} = 1V$ | $\pm 0.5\%$ (typ) |
| Efficiency | $V_{IN} = 12V$, $V_{OUT} = 1V$, 25A, 400kHz | 83% |
| Switching Frequency | Typical switching frequency | 400kHz |
| Short-Circuit Protection | Default setting | Hiccup mode |
| Operating Temperature Range | | -40 to 85°C |
| Over-Temperature Protection | OTP | 155°C |
| Rise Time | V_{OUT} from 0% to 90% | 1.2ms (typ) |
| Calculated MTBF | MIL-HDBK-217F | 4185×10^3 hrs |

NOTE: All electrical characteristics are tested under 25°C ambient temperature, $V_{IN} = 12V$ unless otherwise noted.

Please email "productinfo@monolithicpower.com" for more information