



**THE DATASHEET OF
MP4601EF-LF-Z**





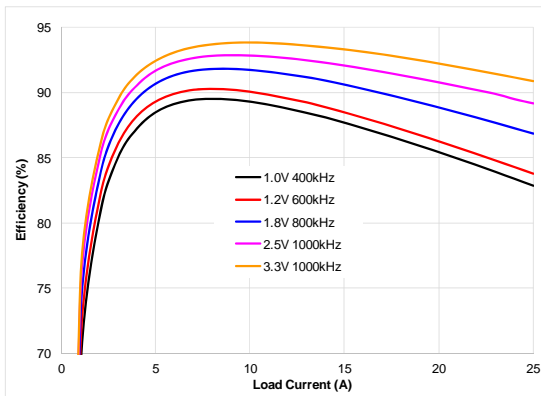
Power Derating

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

TBD

Efficiency vs. Load Current

$V_{IN} = 12V$



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%

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

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

Looking for pricing, stock, or lifecycle information?

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