



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



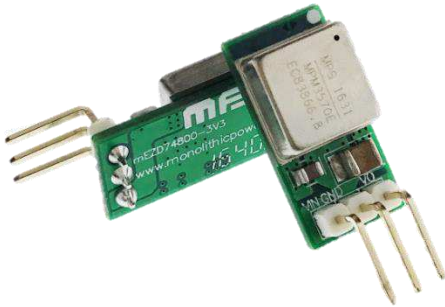
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





mEZ Product Options:

1. Ready-to-Use products
 2. Do-It-Yourself.
- Manufacture assistance is provided

FEATURES

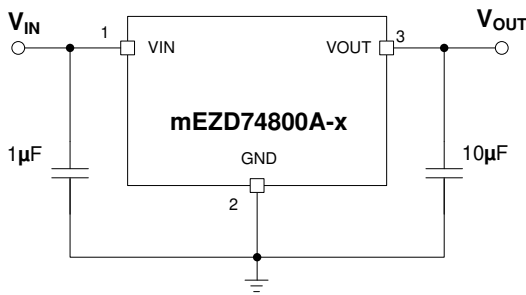
- 4.5V to 75V Wide Operating Input
- 0.3A Load Current
- Hiccup Short-Circuit Protection
- Over-/Under-Voltage Protection
- Over-Current Protection
- Over-Temperature Protection
- Open Design Files and BOM
- Meets EN55022 Class B Emissions

ORDERING INFORMATION

Part Number	Input Voltage (V)	Output Voltage (V)	Output Current (A)
mEZD74800A-A	4.5 - 75	3.3	0.3
mEZD74800A-B	4.5 - 75	5	0.3

ELECTRICAL CHARACTERISTICS

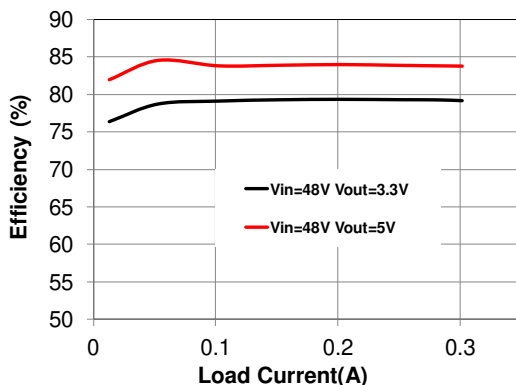
Input Voltage Range	V_{IN_MIN} higher than V_{OUT} by 1V	4.5 to 75V
Output Voltage Set Accuracy		±1.7% (Typ.)
Output Voltage Ripple	$V_{IN}=48V$, $V_{OUT}=3.3V$, Full Load	44mV
Line Regulation	V_{IN} from MIN to MAX, $V_{OUT}=3.3V$	±0.5% (Typ.)
Load Regulation	I_{OUT} from MIN to MAX, $V_{OUT}=3.3V$	±1% (Typ.)
Switching Frequency	$V_{OUT}=3.3V$	140kHz
	$V_{OUT}=5V$	165kHz
Short-Circuit Protection	Short Output to Ground	Hiccup Mode
Operating Temperature Range		-40 to 85°C
Over-Temperature Protection	OTP	175°C
Rise Time	V_{OUT} from 0% to 90%	1.54ms (Typ.)
Calculated MTBF	MIL-HDBK-217F	4185x10 ³ hrs



Typical Application Circuit

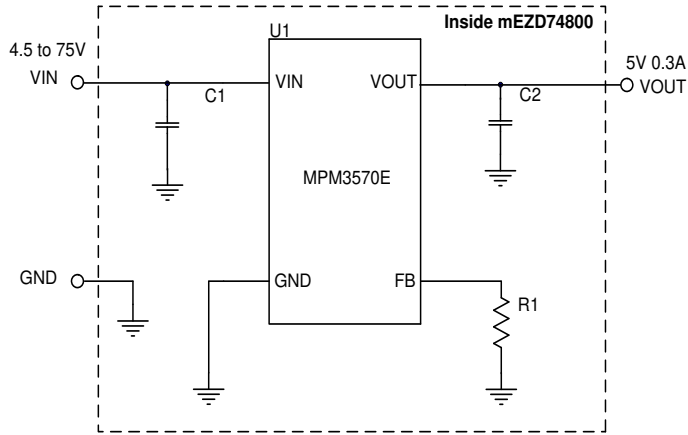
Efficiency vs. Load Current

$V_{IN}=48V$, $V_{OUT}=3.3V$ and $5V$



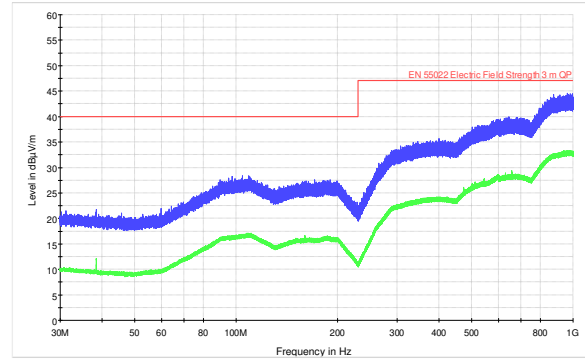
NOTE: All electrical characteristics are tested under 25°C ambient temperature, $V_{IN}=48V$ unless otherwise noted.

DO-IT-YOURSELF SCHEMATIC



RADIATED EMISSIONS

(EN55022 Class B)
24V_{IN}, 5V_{OUT} @ 0.3A

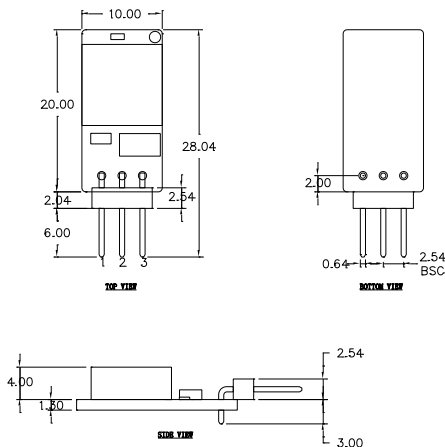
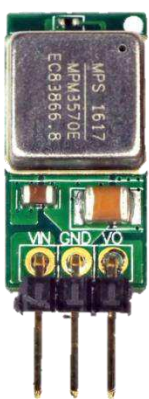


BILL OF MATERIALS

Item	Qty	RefDes	Value	Description	Package	Manufacturer	Manufacturer P/N
1	1	C1	4.7µF	Ceramic Cap., 100V, X7S	1210	muRata	GRM32DC72A475KE01L/ C3225X7S2A475M200AB
2	1	C2	22µF	Ceramic Cap., 10V, X7T	0805	muRata	GRM21BD71A226ME44L/ GRM21BR61A226ME51L
3	1	R1	698kΩ	Film Res., 0.5%	0402	Yageo	RC0402DR-07698KL
4	1	U1	MPM3570E	Synchronous Step-Down Module	LGA10X10	MPS	MPM3570EGLD-Z
5	1	P1	3-pin	3-pin male connector, right angle	Bulk	MYIC	MPS010SRRA-3
6	1	PCB		PCB	10x20mm		mEZD74800A-B

*R1=698kΩ is for 5V output only, R1=NS in 3V3 output version.

PRODUCT PACKAGE AND DIMENSIONS



Pin	Designation	Function
1	VIN	Input Voltage
2	GND	Power Ground
3	VOUT	Output Voltage

NOTE:

Contact factory for different sizes of the boards (Quantity>2k).

For more information, Gerber files, and PCB layout, please contact mEZsupport@monolithicpower.com