



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!



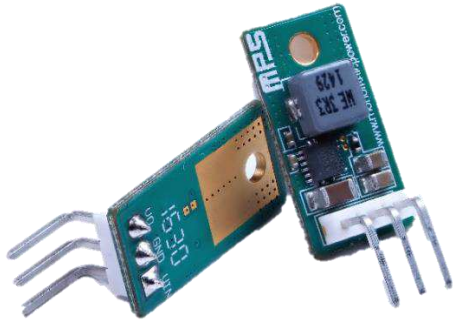
Contact us

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

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

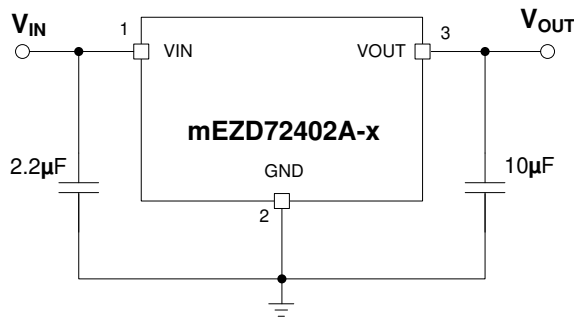
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





mEZ Product Options:

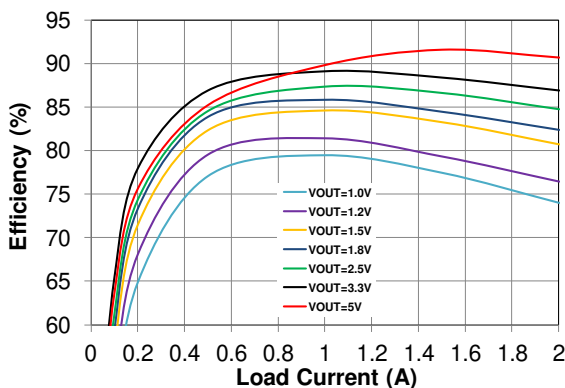
1. Ready-to-Use products
 2. Do-It-Yourself.
- Manufacture assistance is provided



Typical Application Circuit

Efficiency vs. Load Current

$V_{IN}=24V$, $V_{OUT} = 1V - 5V$



NOTE: All electrical characteristics are tested under 25°C ambient temperature, $V_{IN}=24V$ unless otherwise noted.

FEATURES

- 4.5V to 36V Wide Operating Input
- 2A Load Current
- Hiccup Short-Circuit Protection
- Over-/Under-Voltage Protection
- Over-Current Protection
- Over-Temperature Protection
- Open Design Files and BOM

ORDERING INFORMATION

Part Number	Input Voltage (V)	Output Voltage (V)	Output Current (A)
MEZD72402A-X	A - F: 4.5 - 36	1, 1.2, 1.5, 1.8,	2
	G: 6.5 - 36	2.5, 3.3, 5	
Output Voltage Options			
A = 1.0V	B = 1.2V	C = 1.5V	D = 1.8V
E = 2.5V	F = 3.3V	G = 5.0V	

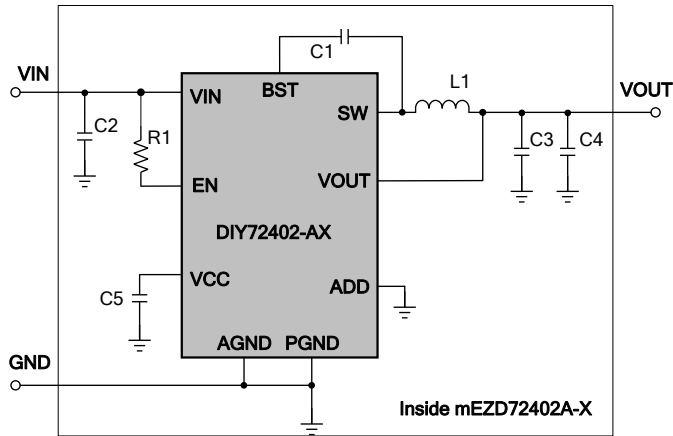
mEZD724xx FAMILY PRODUCTS

Part Number	Input Voltage (V)	Output Voltage (V)	Output Current (A)
mEZD72401A-X	4.5 - 36	1,1.2,1.5,1.8, 2.5,3.3,5, 12	1
mEZD72402A-X	4.5 - 36	1,1.2,1.5,1.8, 2.5,3.3,5	2

ELECTRICAL CHARACTERISTICS

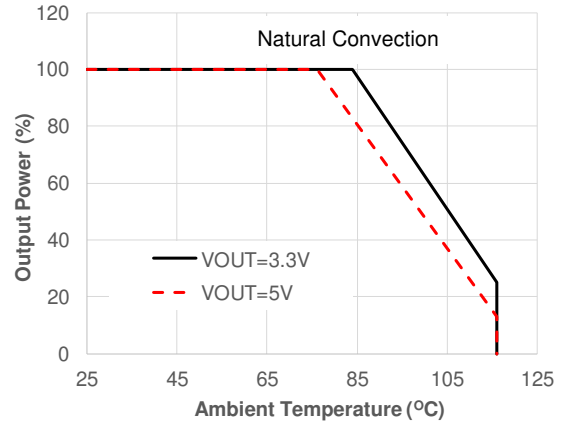
Input Voltage Range	V_{IN_MIN} higher than V_{OUT} by 1V	4.5 or 6.5 to 36V
Output Voltage Set Accuracy		±2.5% (Typ.)
Output Voltage Ripple	$V_{IN}=24V$, $V_{OUT}=3.3V$, Full Load	26.4mV
Line Regulation	V_{IN} from MIN to MAX, $V_{OUT}=3.3V$	±1% (Typ.)
Load Regulation	I_{OUT} from MIN to MAX, $V_{OUT}=3.3V$	±1% (Typ.)
Switching Frequency	Typical Switching Frequency	400kHz
Short-Circuit Protection	Short Output to Ground	Hiccup Mode
Operating Temperature Range		-40 to 85°C
Over-Temperature Protection	OTP	150°C
Rise Time	V_{OUT} from 0% to 90%	0.75ms (Typ.)
Calculated MTBF	MIL-HDBK-217F	4185x10 ³ hrs

DO-IT-YOURSELF SCHEMATIC



POWER DERATING

$V_{IN}=24V$, $V_{OUT}=3.3V$ and $5V$

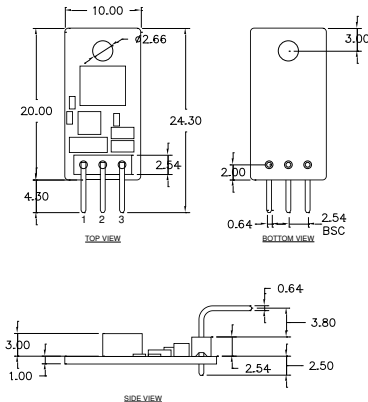
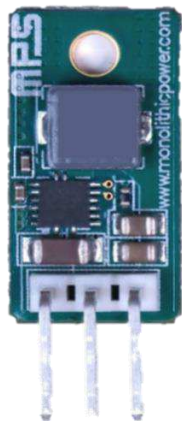


BILL OF MATERIALS

Item	Qty	RefDes	Value	Description	Package	Manufacturer	Manufacturer P/N
1	1	C1	0.22 μ F	Ceramic Cap., 16V, X5R	0402	muRata	GRM155R61C224KA12D
2	1	C2	4.7 μ F	Ceramic Cap., 50V, X7R	1206	muRata	GRM31CR71H475KA12L
3	2	C3, C4	22 μ F	Ceramic Cap., 10V, X7T/X5R	0805	muRata	GRM21BD71A226ME44L/ GRM21BR61A226ME51L
4	1	C5	1 μ F	Ceramic Cap., 10V, X5R	0402	muRata	GRM155R61A105KE01D
5	1	L1*	5.6 μ H	Indc 2.6A, DCR 65.7m Ohm	5.5x5x3mm	Panasonics	ETQP3M6R8KVP
6	1	R1	499k Ω	Film Res., 5%	0402	Yageo	RC0402JR-07499KL
7	1	P1	3-Pin	3-Pin Male Connector, Right Angle	Bulk	MYIC	MPS010SRRA-3
8	1	U1		Synchronous Step-Down Converter	QFN-16	MPS	DIY72402-AX**

* Or equivalent. ** -X Output voltage options (A: 1.0V, B: 1.2V, C: 1.5V, D: 1.8V, E: 2.5V, F: 3.3V, G: 5.0V)

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