



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!



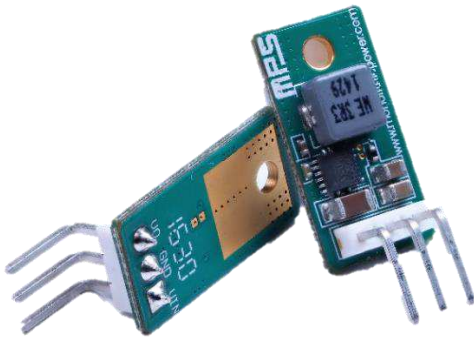
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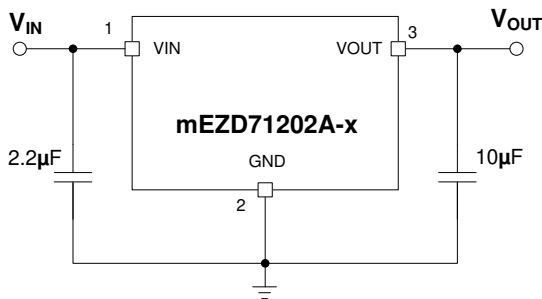
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





mEZ Product Options:

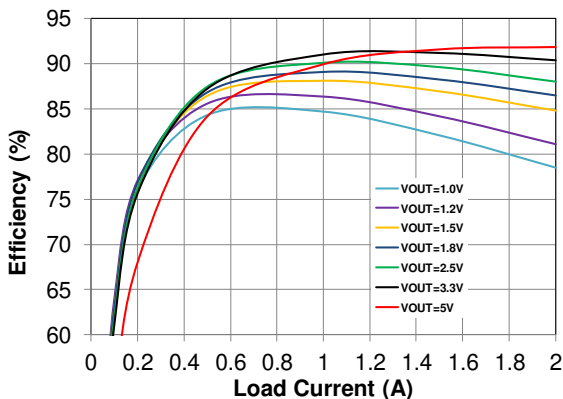
1. Ready-to-Use products
 2. Do-It-Yourself.
- Manufacture assistance is provided



Typical Application Circuit

Efficiency vs. Load Current

$V_{IN}=12V, V_{OUT} = 1V - 5V$



FEATURES

- 4.5V to 24V 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)
MEZD71202A-X	A - F: 4.5 - 24 G: 6.5 - 24	1, 1.2, 1.5, 1.8, 2.5, 3.3, 5	2
Output Voltage Options			
A = 1.0V	B = 1.2V	C = 1.5V	D = 1.8V
E = 2.5V	F = 3.3V	G = 5.0V	

mEZD712xx FAMILY PRODUCTS

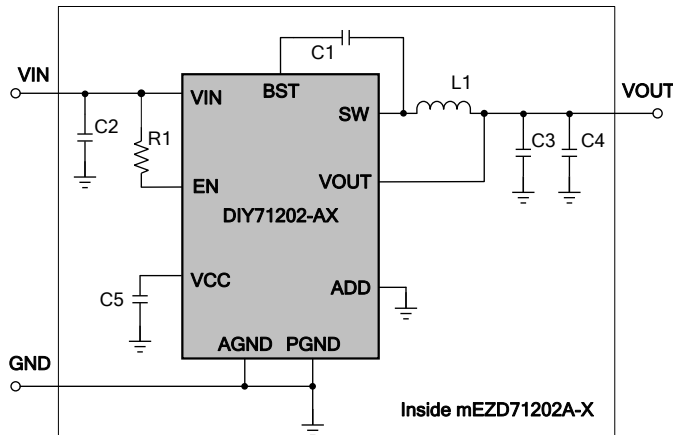
Part Number	Input Voltage (V)	Output Voltage (V)	Output Current (A)
mEZD71201A-X	4.5 - 24	1, 1.2, 1.5, 1.8, 2.5, 3.3, 5	1
mEZD71202A-X	4.5 - 24	1, 1.2, 1.5, 1.8, 2.5, 3.3, 5	2
mEZD71203A-X	4.5 - 16	1, 1.2, 1.5, 1.8, 2.5, 3.3	3
mEZD71210A-A	4.5 - 17	1	10

ELECTRICAL CHARACTERISTICS

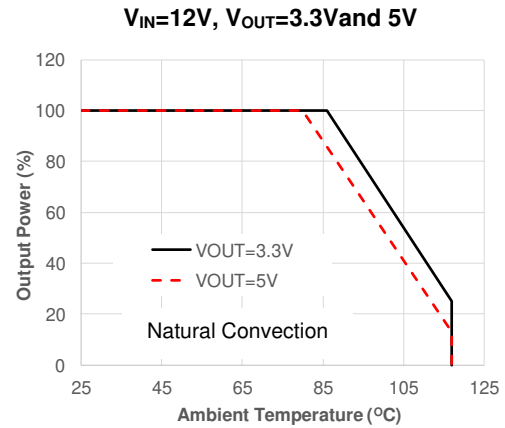
Input Voltage Range	V_{IN_MIN} higher than V_{OUT} by 1V	4.5 or 6.5 to 24V
Output Voltage Set Accuracy		±2.5% (Typ.)
Output Voltage Ripple	$V_{IN}= 12V, V_{OUT}= 3.3V, Full Load$	33.6mV
Line Regulation	V_{IN} from MIN to MAX, $V_{OUT}= 3.3V$	±1% (Typ.)
Load Regulation	I_{OUT} from MIN to MAX, $V_{OUT}= 3.3V$	±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

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

DO-IT-YOURSELF SCHEMATIC



POWER DERATING

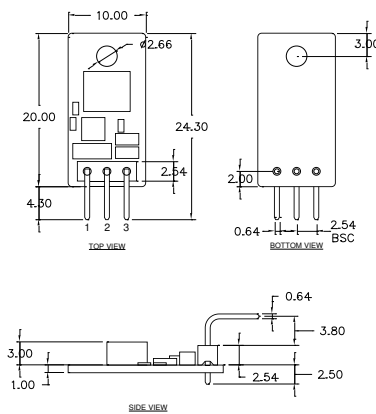


BILL OF MATERIALS

Item	Qty	RefDes	Value	Description	Package	Manufacturer	Manufacturer P/N
1	1	C1	0.22µF	Ceramic Cap., 16V, X5R	0402	muRata	GRM155R61C224KA12D
2	1	C2	4.7µF	Ceramic Cap., 50V, X7R	1206	muRata	GRM31CR71H475KA12L
3	2	C3, C4	22µF	Ceramic Cap., 10V, X7T/X5R	0805	muRata	GRM21BD71A226ME44L/ GRM21BR61A226ME51L
4	1	C5	1µF	Ceramic Cap., 10V, X5R	0402	muRata	GRM155R61A105KE01D
5	1	L1*	3.3µH	Indc 4.1A, DCR 27.3mΩ	5.5x5x3mm	Panasonics	ETQP3M3R3KVP
6	1	R1	499kΩ	Film Res., 1%	0402	Yageo	RC0402FR-07499KL
7	1	P1	3-pin	3-pin male connector, right angle	Bulk	MYIC	MPS010SRRA-3
8	1	U1		Synchronous Step-Down Converter	FCQFN3x3-16	MPS	DIY71202-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