

DC-DC Converter Short Form

MYGTM01210BZN (Small Size & High Efficiency)

FEATURES

- High efficiency & Small Size SIL
- Wide input range (17V to 40V)
- Adjustable output voltage (5V , 12V)
- Single output max. 10A
- ON/OFF control function
- Metal case type
- Short circuit protection



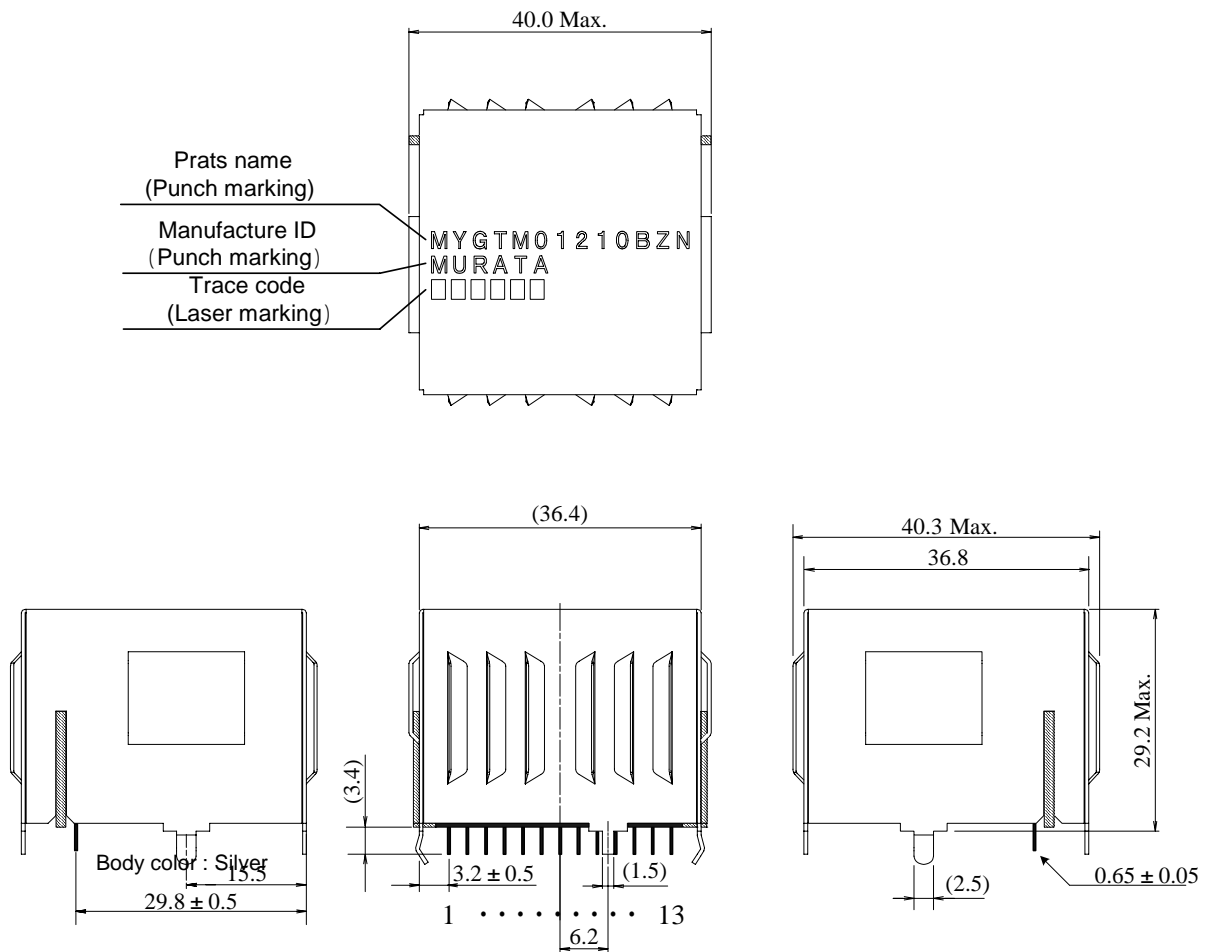
GENERAL SPECIFICATIONS (Ta=25°C)

Item	Symbol	Condition	MIN.	TYP.	MAX.	UNIT	
Input Voltage	Vin		17.0	24.0	40.0	V	
Output Voltage	Vout	Vin=17.0~40.0V, Iout=0~10A	VAR=GND	11.64	12.00	12.36	V
			VAR=Open	4.85	5.00	5.15	
Output Current	Iout	Vin=17.0~40.0V	0	-	10	A	
Ripple Voltage	Vrpl	Vin=24V, Iout=10A, BW=20MHz	-	100	-	mVpp	
Efficiency	EFF	Vin=24V, Iout=10A, Vout=12V	-	97.3	-	%	
ON/OFF Voltage	ON/OFF	Vin=24V Iout=10A	OFF	2.5	-	-	V
			ON	-	-	0.5	
Protection Output Current	Iocp	Vin=17.0~40.0V	10.5	-	-	A	
Short Circuit Protection	SCP	If output is shorted to GND, DC-DC Converter shall be operated in a hiccup mode. After the short circuit event has cleared, the output is automatically brought back into regulation.					

⚠ Note:

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DIMENSIONS



【Unit : mm】

()...reference value

Lead Pitch : 2.5 ± 0.3mm

Distance between the both roots of Pin.

Tolerance is not accumulated.

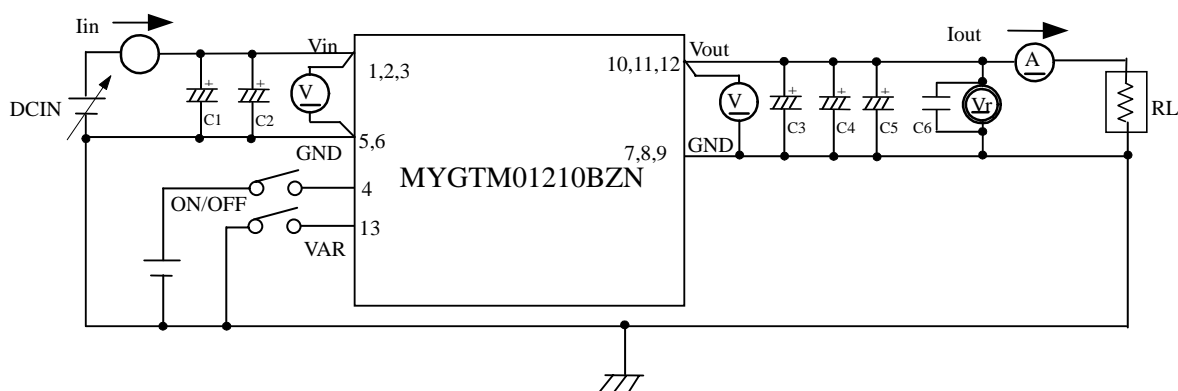
The tolerance not specified is ±0.3

Pin No.	Symbol	Function
1,2,3	Vin	Input
4	ON/OFF	Remote ON/OFF
5,6,7,8,9	GND	GND
10,11,12	Vout	Output
13	VAR	Output Voltage Adjust

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TEST CIRCUIT

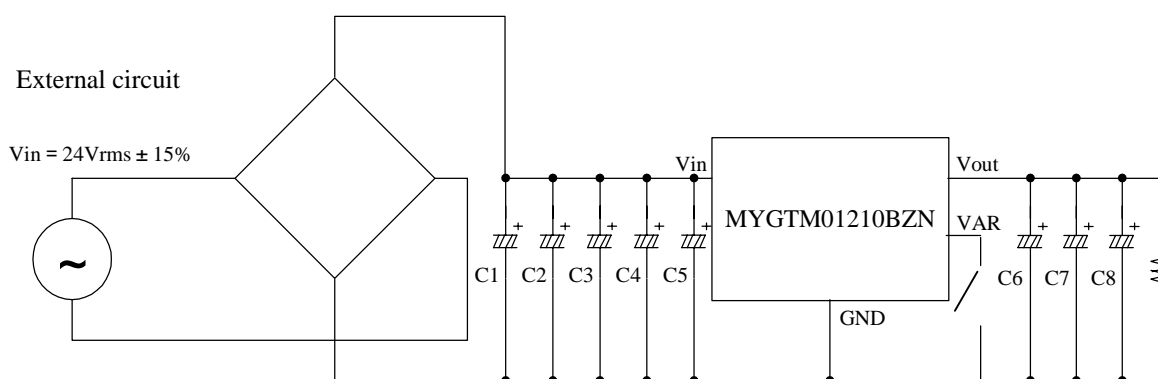


C1,C2 : 1000 μ F/50V Low Impedance Aluminum Electrolytic Capacitor (ZL series : Rubycon)
 C3,C4,C5 : 1000 μ F/16V Low Impedance Aluminum Electrolytic Capacitor (EKZE160ETD102MJ20S NIPPON CHEMI-CON)
 C6 : 0.1 μ F

Please make sure to place C1~C5 nearby input and output terminal of DC-DC converter.

INPUT/OUTPUT ALUMINUM ELECTROLYTIC CAPACITOR FOR FULL-WAVE RECTIFIER (REFERENCE)

* When input is AC24V \pm 15% 50Hz or 60Hz full-wave rectifier, please refer following external circuit.

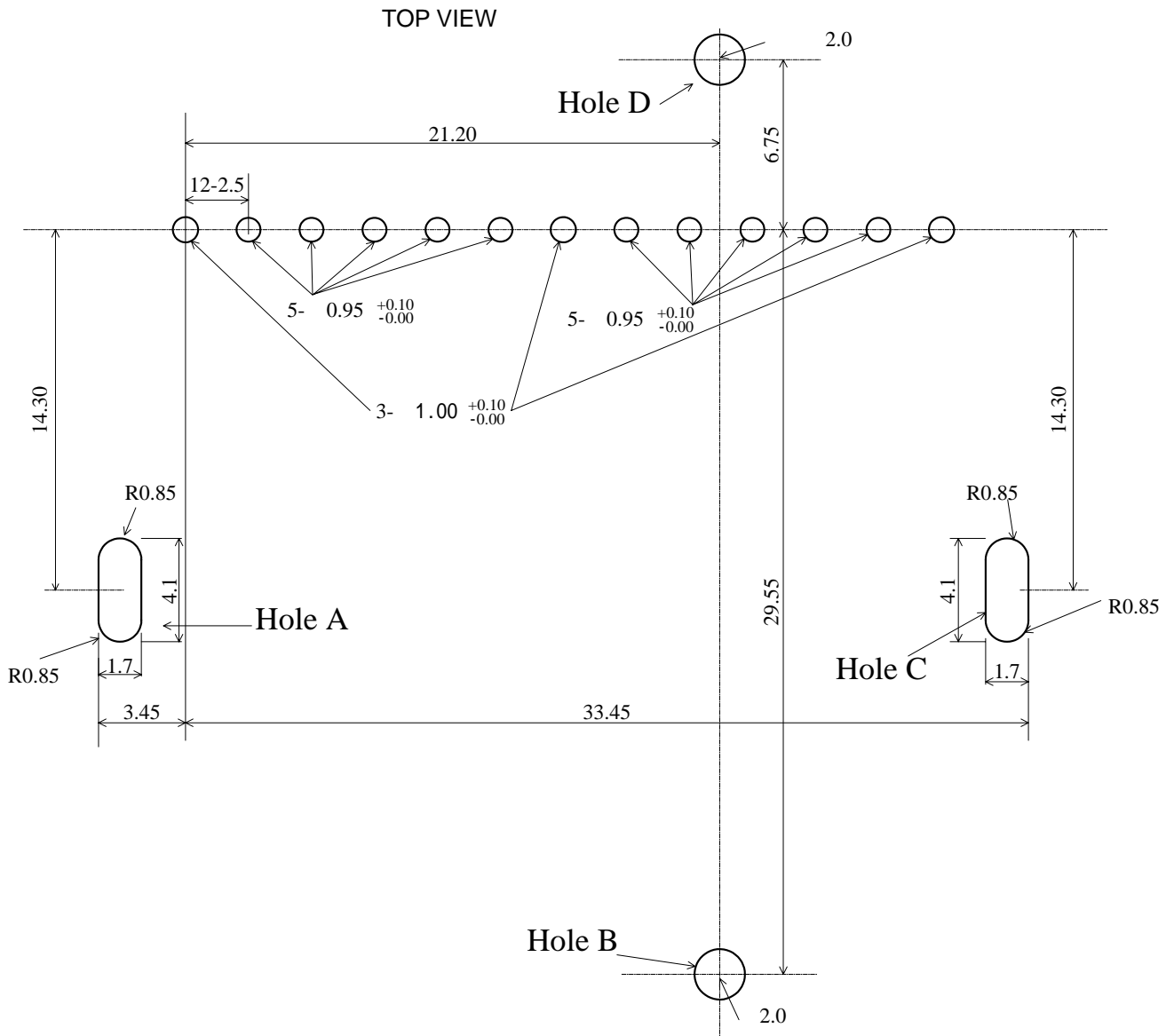


C1,C2,C3 : 1000 μ F/50V Low Impedance Aluminum Electrolytic Capacitor (EKZE500EC3102ML25S NIPPON CHEMI-CON)
 C4,C5 : 1000 μ F/50V Low Impedance Aluminum Electrolytic Capacitor (EKZE500EC3102ML25S NIPPON CHEMI-CON)
 C6,C7,C8 : 1000 μ F/16V Low Impedance Aluminum Electrolytic Capacitor (EKZE160ETD102MJ20S NIPPON CHEMI-CON)


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FOOT PRINT DIMENSIONS

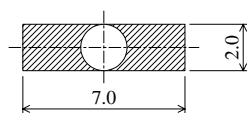
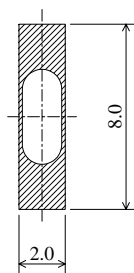


Unit 【mm】

Metal case is connected to GND. So hole A,B,C and D should be connected to GND.
The Area indicated  is allowed no pattern or only GND pattern.

Hole A and C

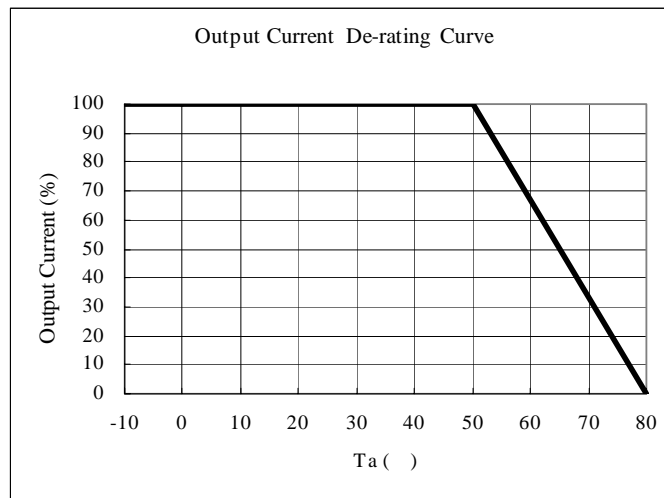
Hole B and D



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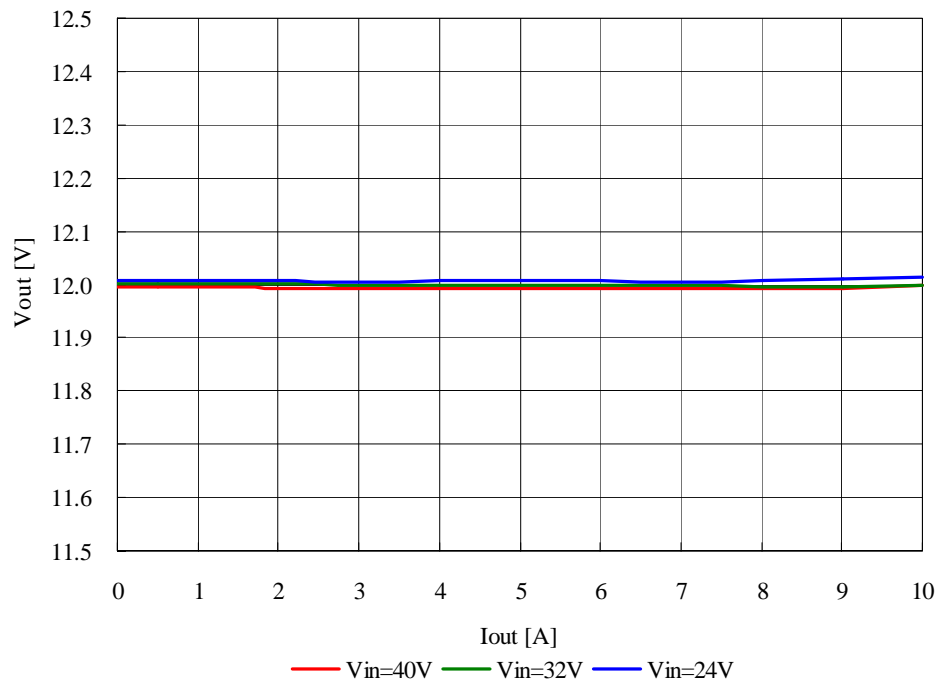
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THERMAL DERATING



OUTPUT VOLTAGE REGULATION (Ta=25°C)

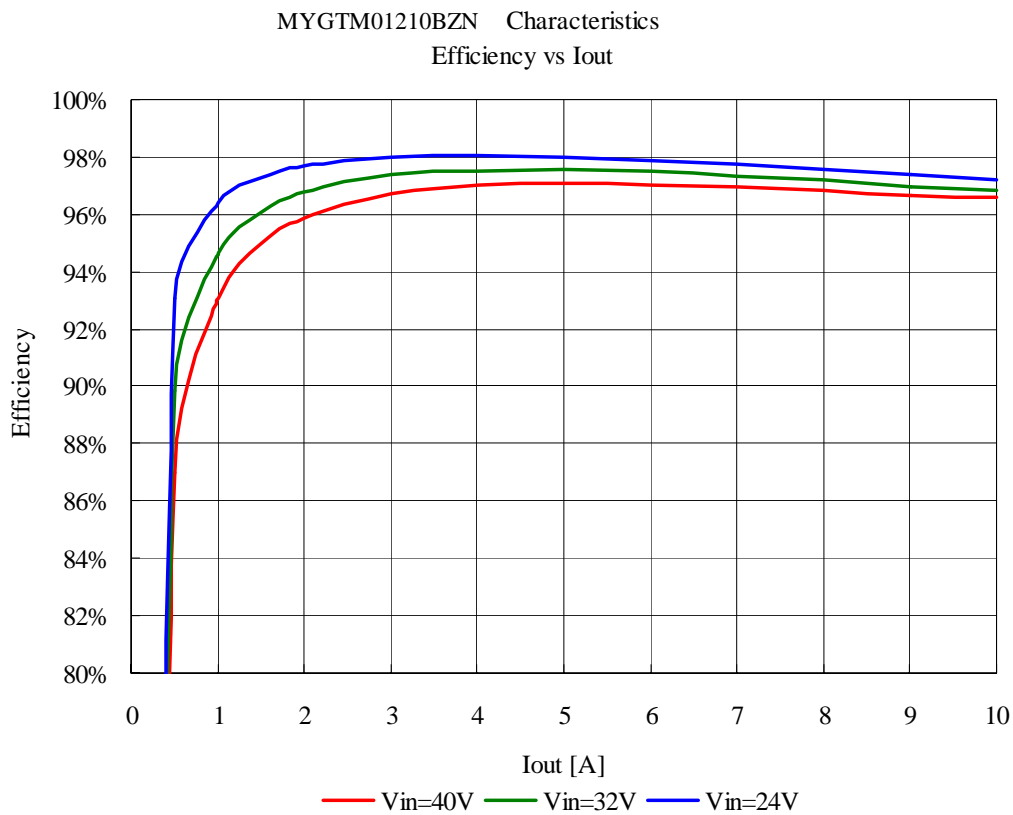
MYGTM01210BZN Characteristics
Vout vs Iout



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EFFICIENCY (Ta=25°C)



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