

# DC-DC Converter Short Form

## MYGTR01205BZN (Small Size & High Efficiency)

### FEATURES

- High efficiency & Small Size SIL
- Wide input range (17V to 40V)
- Adjustable output voltage ( 5.0V or 8.5V or 12.0V )
- Plastic case type
- ON/OFF control function
- Short circuit protection



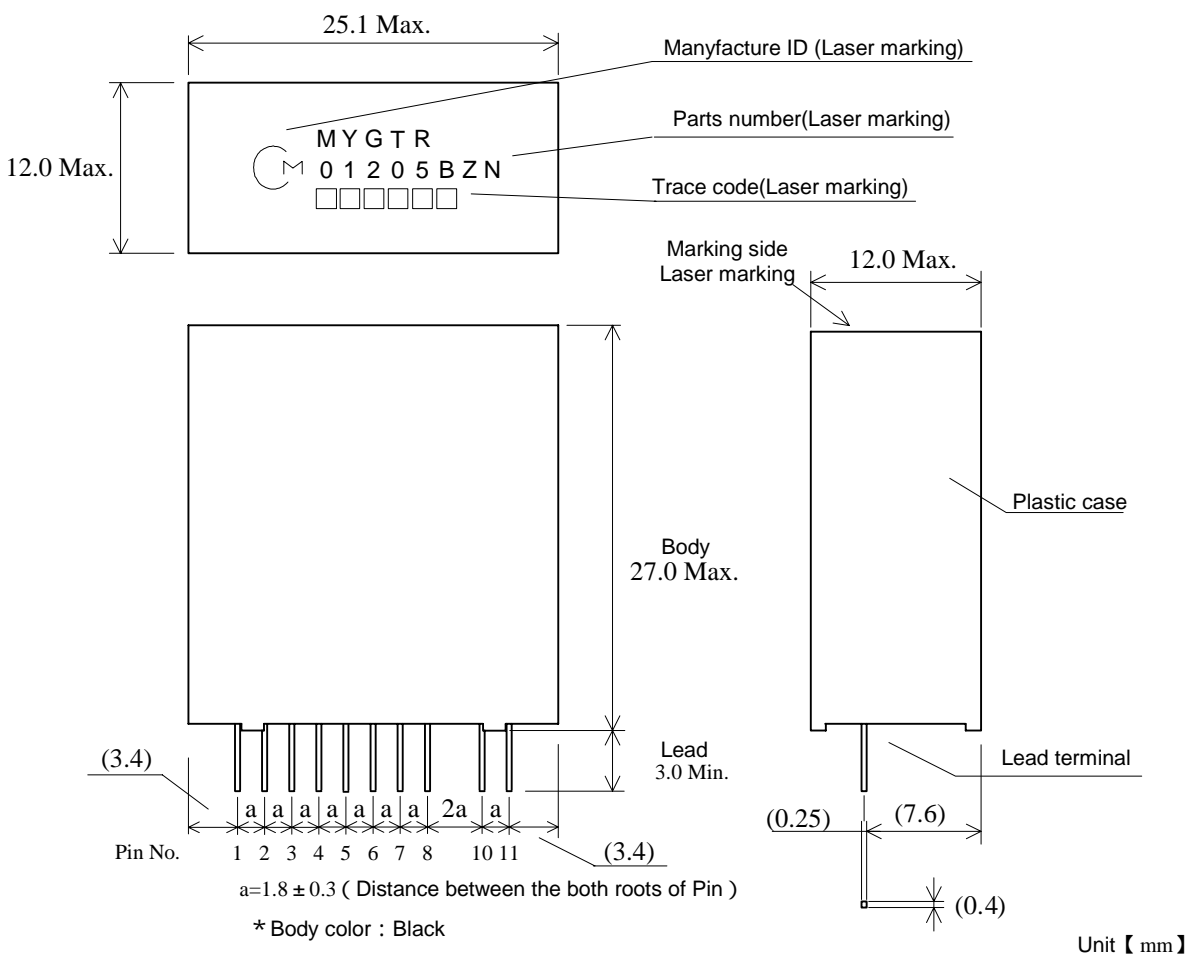
### GENERAL SPECIFICATIONS (Ta=25°C)

Item	Symbol	Condition	MIN.	TYP.	MAX.	UNIT	
Input Voltage	Vin		17.0	24.0	40.0	V	
Output Voltage	Vout1	Vin=17.0~40.0V	R1=0Ω Iout=0~3A	11.64	12.00	12.36	V
	Vout2		R1=1kΩ Iout=0~4A	8.245	8.500	8.755	
	Vout3		R1=Open Iout=0~5.2A	4.85	5.00	5.15	
Output Current	Iout1	Vin=17.0~40.0V	R1=0Ω Vout=12Vtyp.	0.0	-	3.0	A
	Iout2		R1=1kΩ Vout=8.5Vtyp.	0.0	-	4.0	
	Iout3		R1=Open Vout=5Vtyp.	0.0	-	5.2	
Ripple Voltage	Vrpl	Vin=24V, Iout=5.2A, Vout=5V BW=20MHz	-	100	-	mVpp	
Efficiency	EFF	Vin=24V, Iout=5.2A, Vout=5V	-	93	-	%	
Remote Voltage	On/Off	Vin=17.0~40.0V	OFF	2.5	-	-	V
			ON	-	-	0.5	
Protection Output Current	Iocp	Vin=17.0~40.0V	5.6	-	-	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:

1. This datasheet is downloaded from the website of Murata Manufacturing co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

**DIMENSIONS**



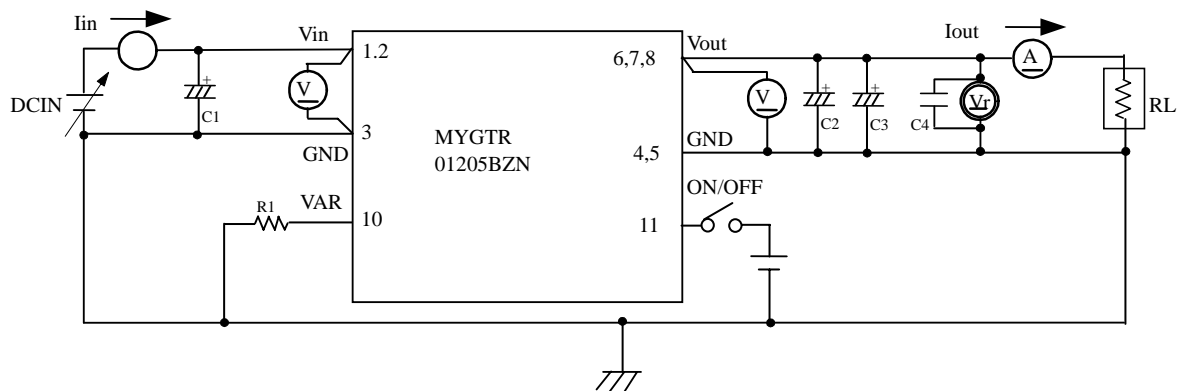
( )...reference value  
Tolerance is not accumulated.

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

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## TEST CIRCUIT

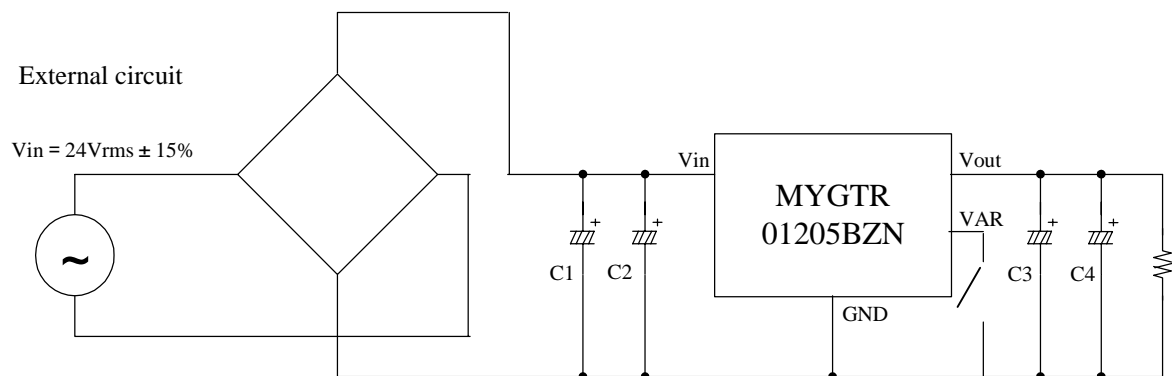


- C1 : 1000 $\mu$ F/50V Low Impedance Aluminum Electrolytic Capacitor (ZL series : Rubycon)  
 C2,C3 : 1000 $\mu$ F/16V Low Impedance Aluminum Electrolytic Capacitor (EKZE160ETD102MJ20S  
 NIPPON CHEMI-CON)  
 C4 : 0.1 $\mu$ F  
 R1 :  $\pm$ 1%, 1/16W Chip Resistor

Please make sure to place C1~C3 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.

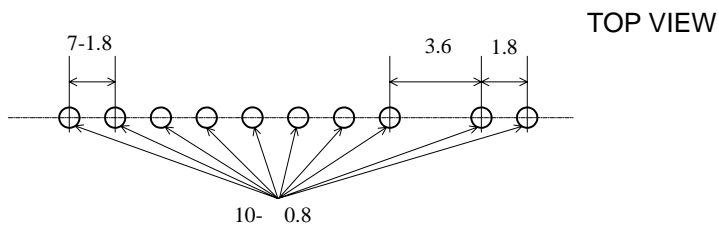


- C1,C2 : 1000 $\mu$ F/50V Low Impedance Aluminum Electrolytic Capacitor (EKZE500EC3102ML25S  
 NIPPON CHEMI-CON)  
 C3,C4 : 680 $\mu$ F/16V Low Impedance Aluminum Electrolytic Capacitor (EKZE160ETD102MJ20S  
 NIPPON CHEMI-CON)

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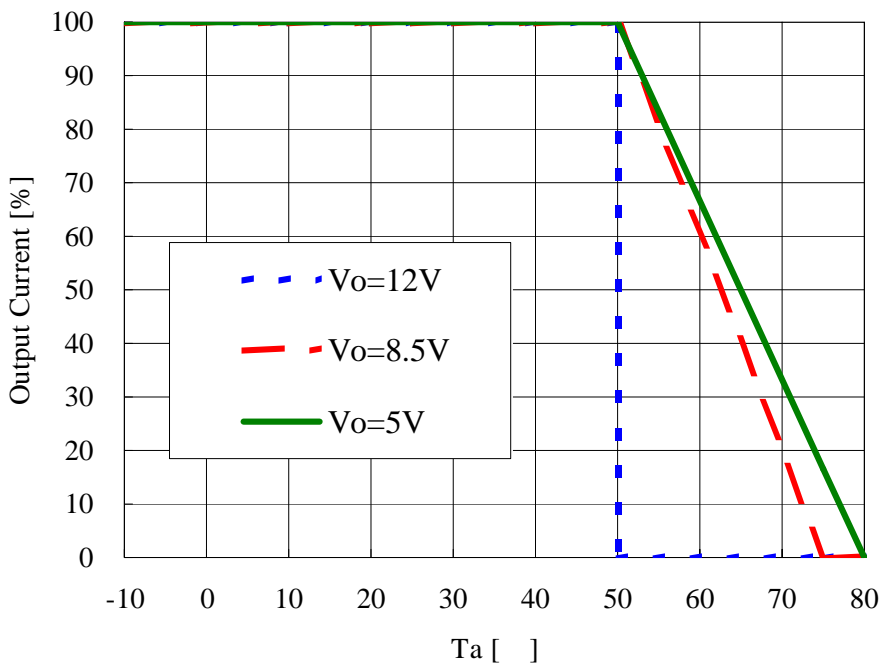
FOOT PRINT DIMENSIONS



Unit 【mm】

THERMAL DERATING

Output Current Derating Curve



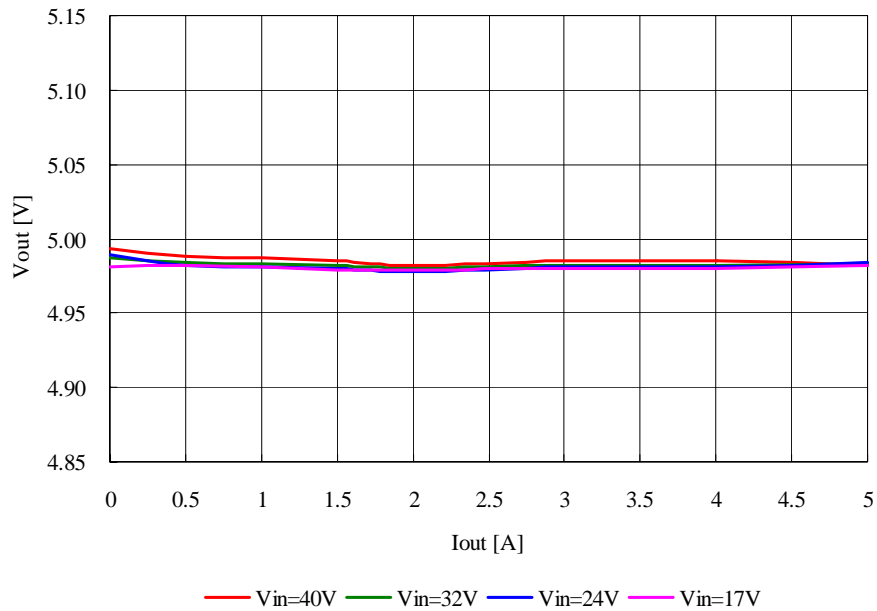
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### OUTPUT VOLTAGE (Ta=25°C)

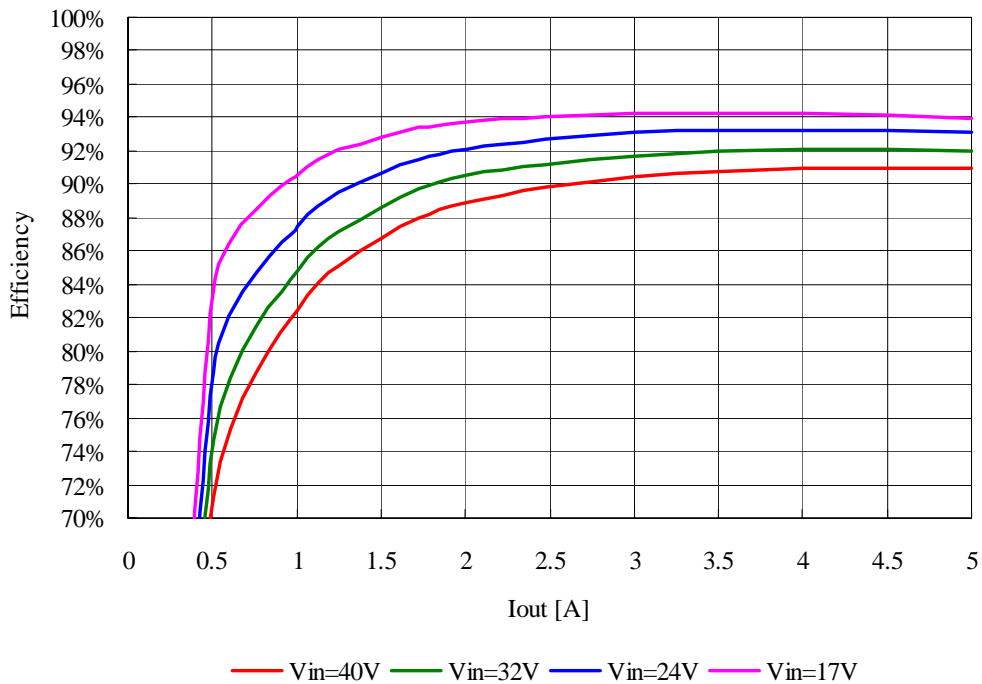
Vout=5.0V

MYGTR01205BZN Characteristics  
Vout vs Iout (Vout=5.0V)



### EFFICIENCY (Ta=25°C)

MYGTR01205BZN Characteristics  
Efficiency vs Iout (Vout=5.0V)



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