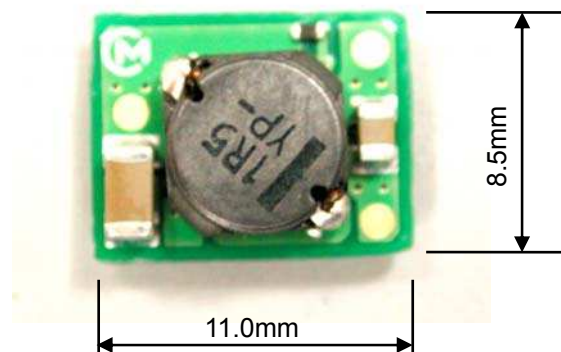


DC-DC Converter Short Form

MPDTY201S (Ultra Small POL)

■ Features

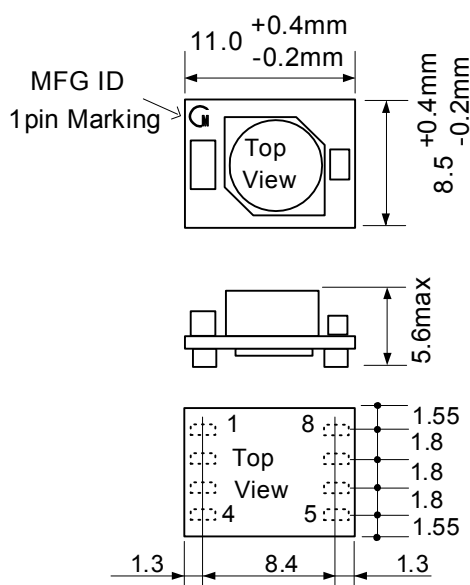
- 3.0-5.5V Wide Input Voltage Range
- 0.8-2.5V Wide Output Voltage Range
- 3Amp. Output Current
- Small Footprint (93.5mm²)
- On/Off Control Function
- Short Circuit Protection (Latch-mode Protection)
- UVLO



■ GENERAL SPECIFICATIONS (Ta=25°C)

Item	Symbol	Condition	MIN.	TYP.	MAX.	UNIT
Input Voltage	Vin		3.0		5.5	V
Output Voltage	Vout	Vin=5V	0.8		2.5	V
		Vin=3.3V	0.8		1.8	V
Output Current	Iout		0		3	A
Remote ON/OFF	ON/OFF	Module enable (ON)	2.0	Vin		V
		Module disable (OFF)		GND	0.8	V
Ripple Voltage	Vrip	Vin=5V,Vo=2.5V,Io=3A.		20		mVpp
Efficiency	EFF	Vin=5V,Vo=2.5V,Io=3A.		87		%

■ DIMENSIONS

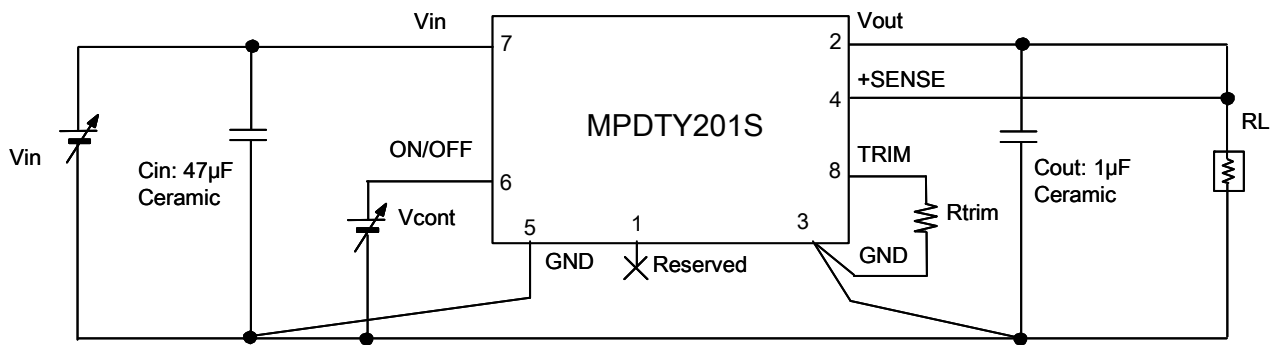


Pin No.	Signal
1.	Reserved
2.	Vout
3.	GND
4.	+SENSE
5.	GND
6.	ON/OFF
7.	Vin
8.	TRIM

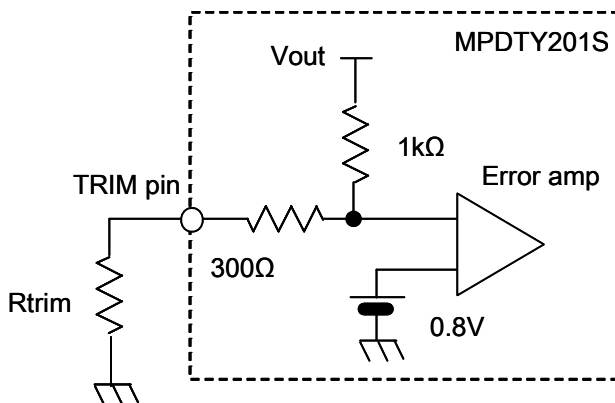
⚠ Note:

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.

■ TEST CIRCUIT



■ OUTPUT VOLTAGE ADJUSTMENT



$$R_{trim} = \frac{800}{V_{out}[V] - 0.8[V]} - 300[\Omega]$$

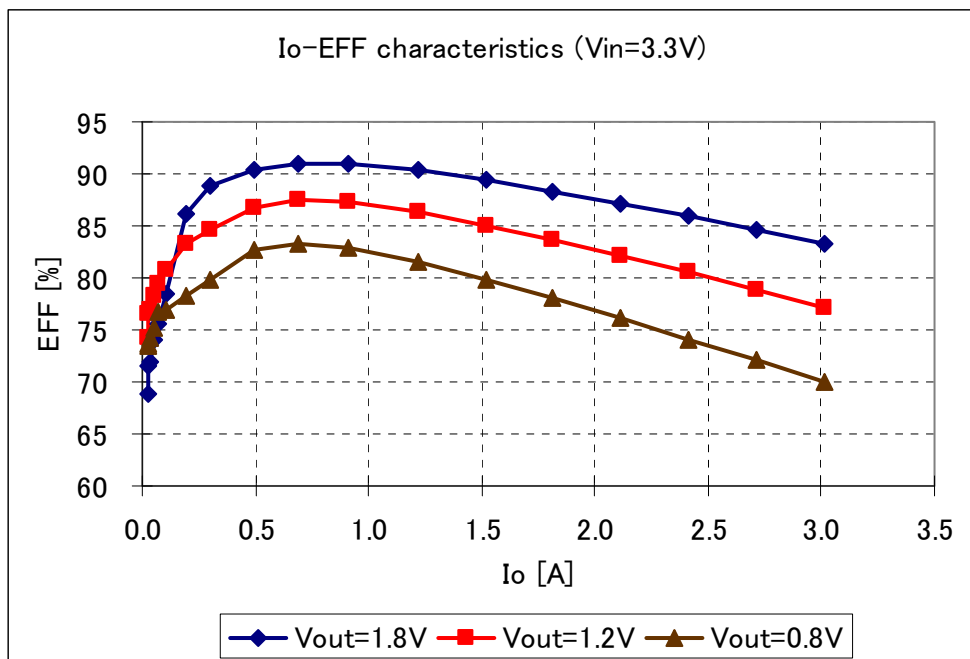
<RTRIM CALCULATION EXAMPLE>

Vout(V)	Calculated Rtrim(Ω)	Rtrim example(Ω)
2.5	170.6	160+10
1.8	500	470+30
1.5	842.9	820+22
1.2	1700	1.5k+200
1.0	3700	36k+100
0.8	∞	Open

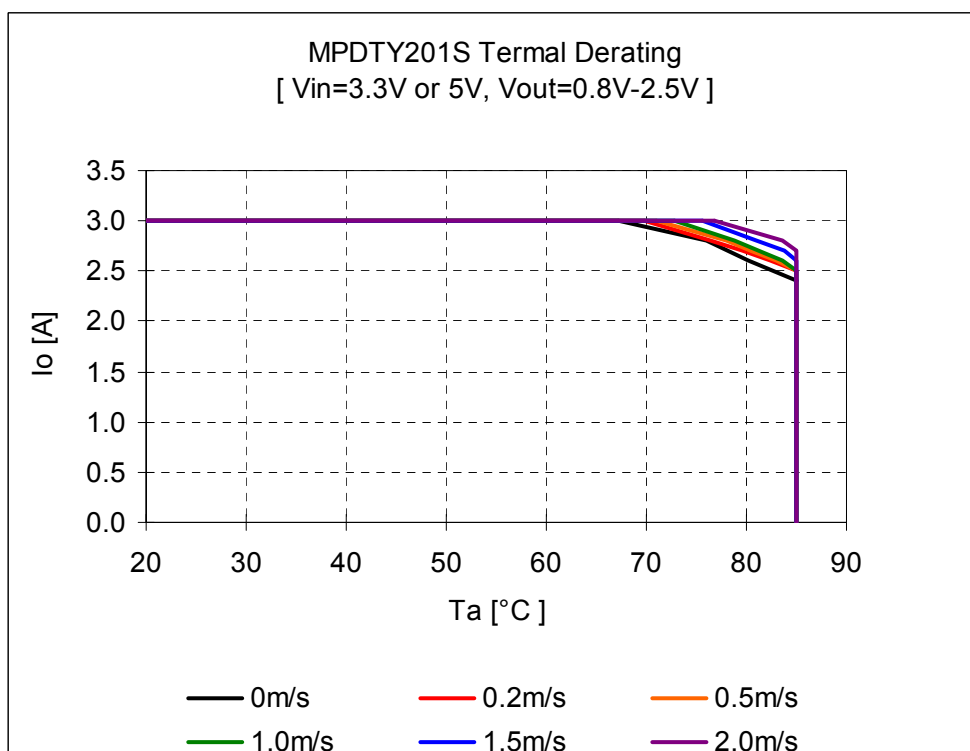
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■ EFFICIENCY CHARACTERISTICS



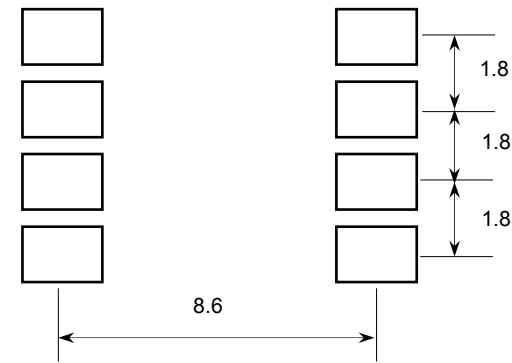
■ THERMAL DERATING



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■ PCB LAND PATTERN RECOMMENDATION

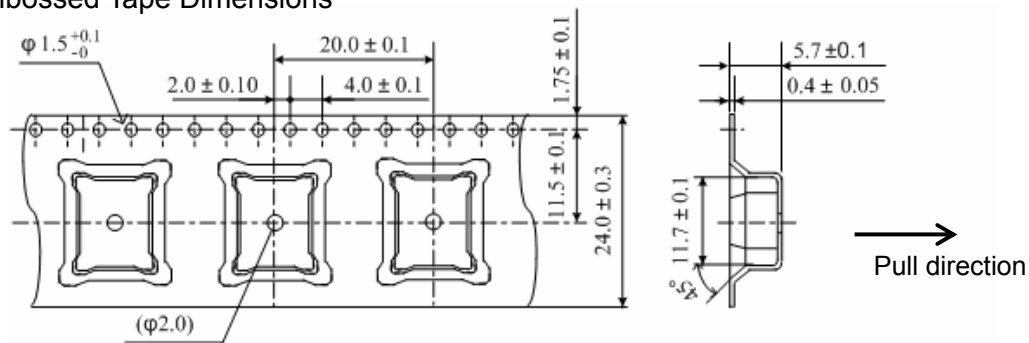


Unit: mm

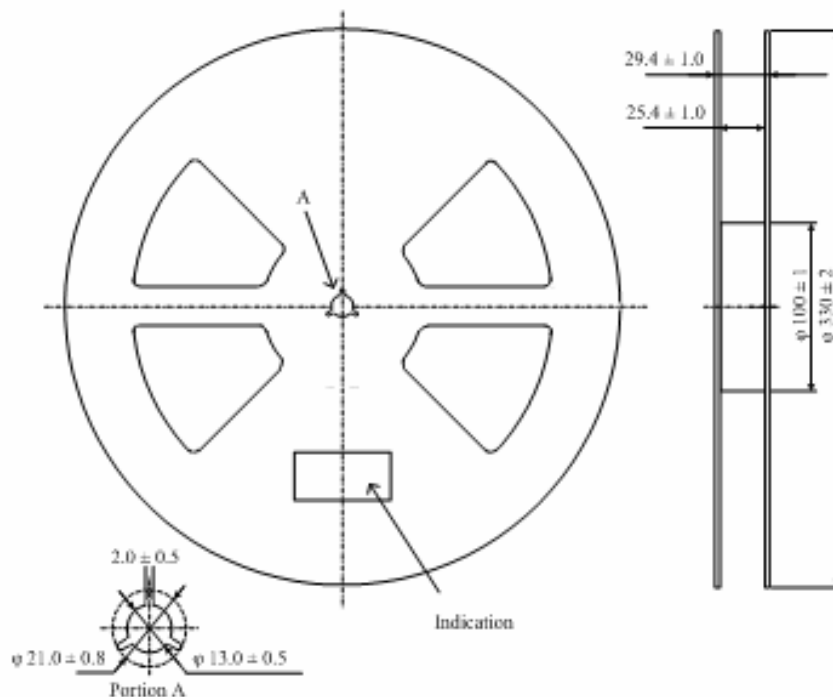
Recommended land size 2.4mm × 1.4mm

■ PACKAGING INFORMATION

Embossed Tape Dimensions



Reel Dimensions



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