

DC-DC Converter Short Form

MPDTY402S (Industry standard Foot Print / 16A output POL)

■ Features

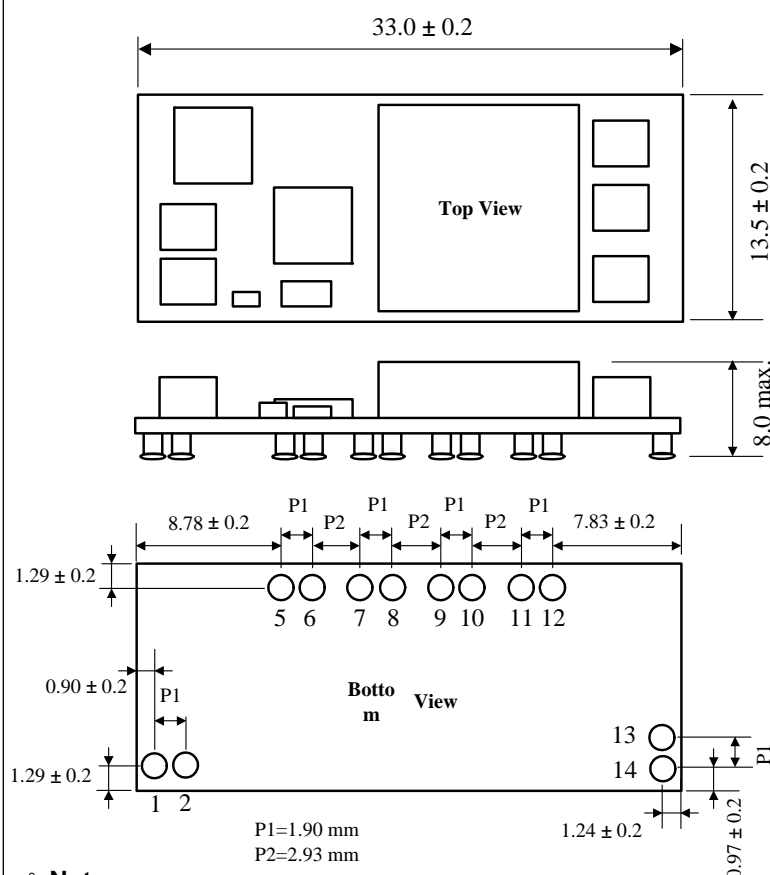
- Wide Input Voltage (3.0-5.5V)
- Wide Output Voltage (0.7525-3.3V)
- 16A Output Current
- On/Off Control Function
- Short Circuit Protection
- Austin Lynx Pin Compatible
- Safety Agency Approvals : UL/cUL 60950, EN60950, VDE-(Pending)



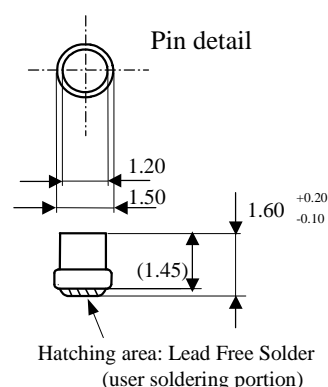
■ GENERAL SPECIFICATIONS (Ta=-40 °C to +85°C)

Item	Symbol	Condition	MIN.	TYP.	MAX.	UNIT
Input Voltage	Vin	Vout≤2.75V, Vin-Vout≥0.5V	3.0	3.3	5.5	V
			4.5	5.0	5.5	V
Output Voltage	Vout		0.7525		3.3	V
Output Current	Iout		0		16	A
Ripple Voltage	Vrip	Vin=5V, Vo=3.3V, Io=16A.		50		mVpp
Efficiency	EFF	Vin=5V, Vo=3.3V, Io=16A.		95		%

■ DIMENSIONS PIN DESCRIPTIONS



Pin No.	Signal
1, 2	Vin
5, 6	GND
7, 8	Vout
9, 10	TRIM
11, 12	Sense
13, 14	ON/OFF

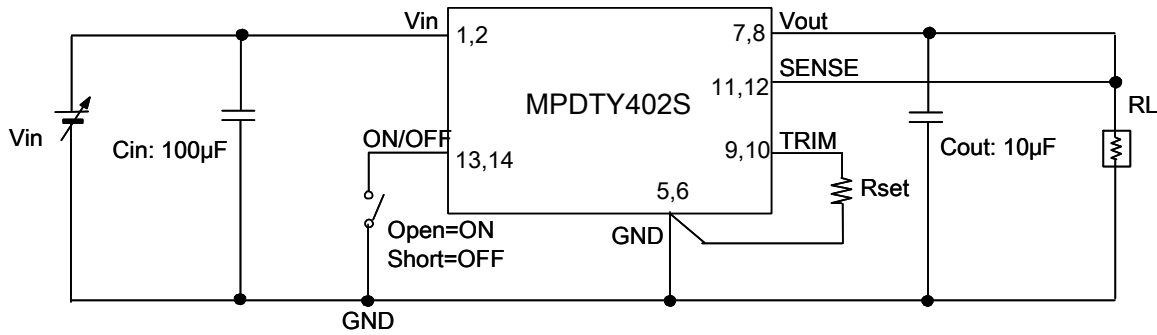


Unit: mm
Tolerance: ±0.25mm

⚠ Note:

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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



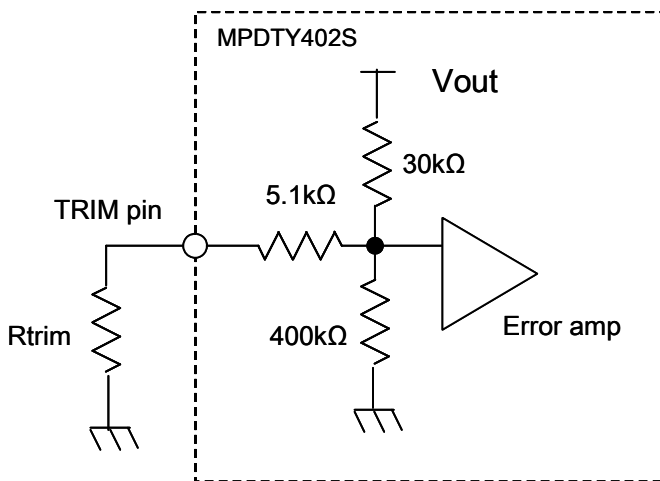
Cin : 100µF / 6.3V

Ceramic Capacitor

Cout : 10µF / 6.3V

Ceramic Capacitor

■ OUTPUT VOLTAGE ADJUSTMENT



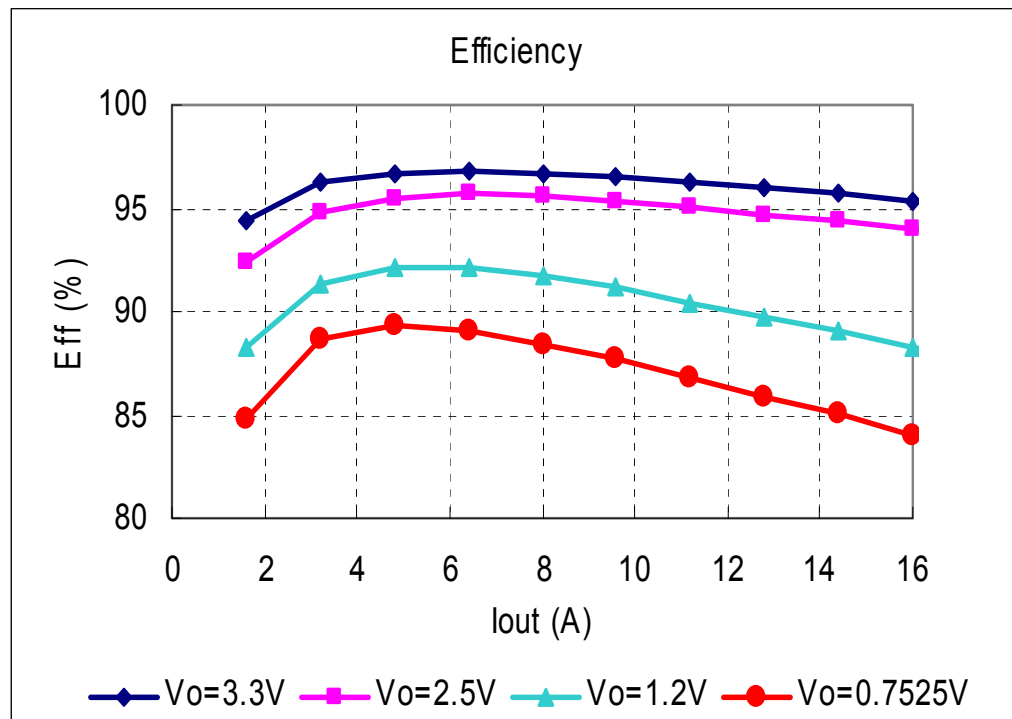
$$R_{trim} = \frac{21070}{V_{out} - 0.7525} - 5110 \quad [\Omega]$$

Vout[V]	Calculated Rtrim[Ω]	Applied Rtrim (example) [Ω]
3.3	3160	3.0K+160
2.5	6947	6.8k+150
1.8	15004	15k+3.9
1.5	23077	22k+1.1k
1.2	41973	39k+3k
0.7525	Open	Open

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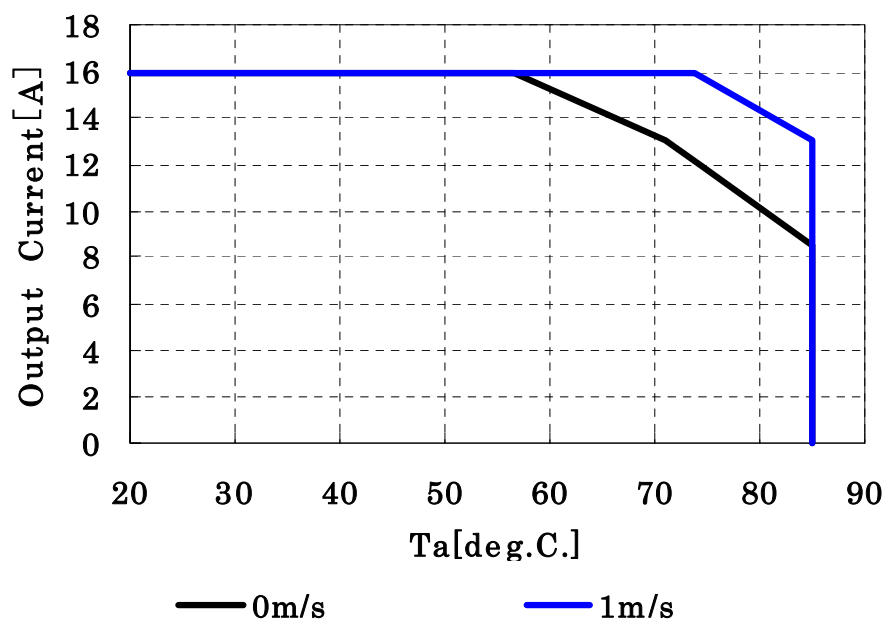
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■ EFFICIENCY CHARACTERISTICS



■ THERMAL DERATING

MPDTY402S Thermal Derating



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