

DC-DC Converter Short Form

MPD6S022S (Output Voltage Variable / 3A Output)

■ Features

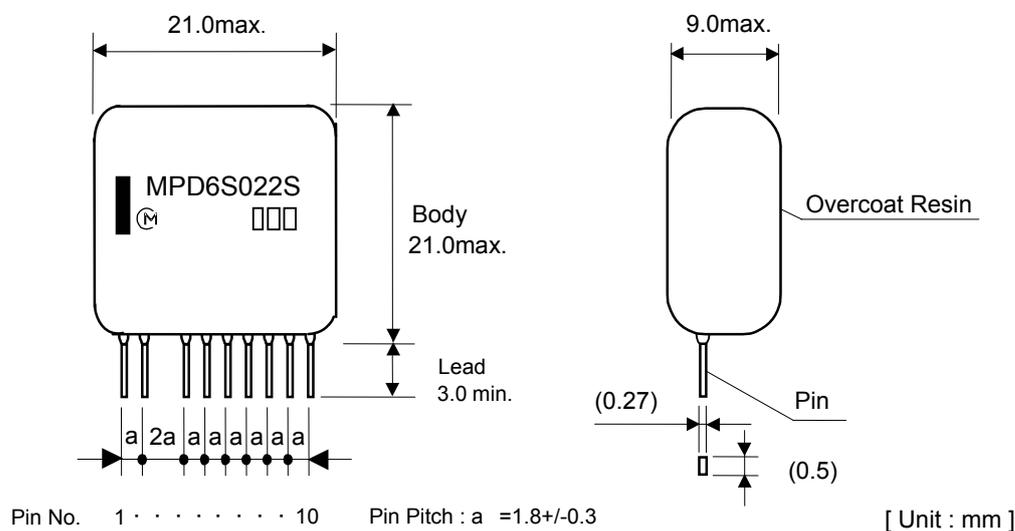
- High Efficiency (95%@3.3V/1A)
- Small Footprint SIP
- Wide Output Voltage (1.1-3.6V)
- Wide Input Voltage (3.0-5.5V)
- Short Circuit Protection
- No external caps required



■ General Specifications (Ta=25°C)

Item	Symbol	Condition	MIN.	TYP.	MAX.	UNIT
Input Voltage	Vin		3.0	5.0	5.5	V
Output Voltage	Vout	Vin-Vout>1V	1.1	-	3.6	V
Output Current	Iout		0	-	3	A
Ripple Voltage	Vrip	Vin=5V,Vo=3.3V,Io=3A.	-	-	100	mVpp
Efficiency	EFF	Vin=5V,Vo=3.3V,Io=1A.	-	95	-	%

■ Dimensions and Pin Assign



Pin No.	Signal
1.	Vin
2.	ON/OFF
3.	no pin
4,5.	N.C(internally used)
6,7.	GND
8.	Adjust
9,10.	Vout

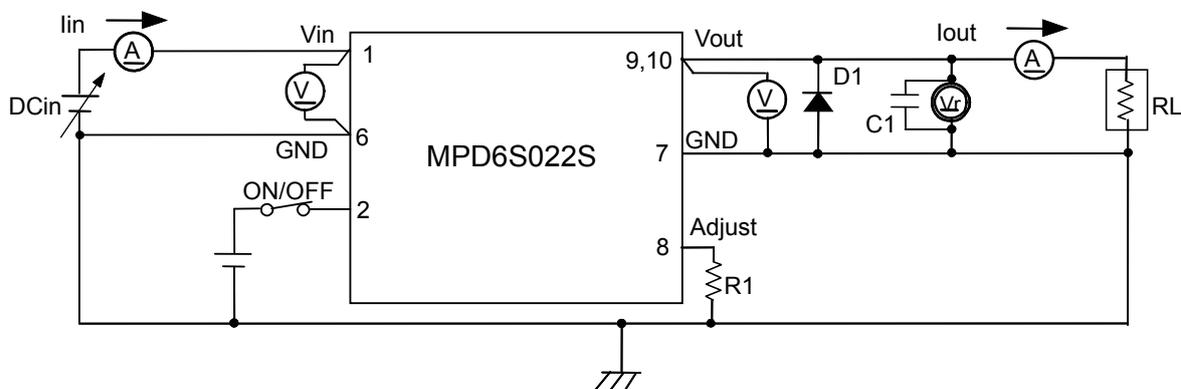
⚠ Note:

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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.

■ Rating

- Input Voltage : 3.0 to 5.5V
- ON/OFF Voltage : 0 to Vin
- Operating Ambient Temperature : 0 to +70 °C
- Storage Ambient Temperature : -40 to +85 °C

■ Test Circuit

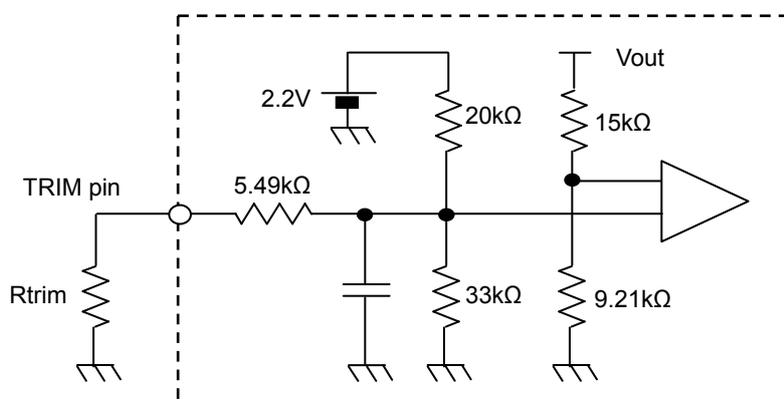


■ Output Voltage Adjustment

$$R1 = \frac{20}{\frac{5.782}{V_{out}[V]} - 1.606} - 5.479[\text{k}\Omega]$$

<RTRIM(R1) CALCULATION EXAMPLE>

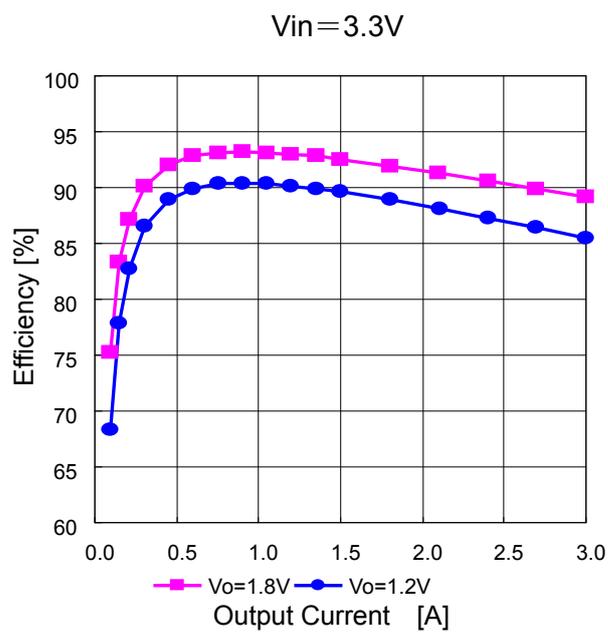
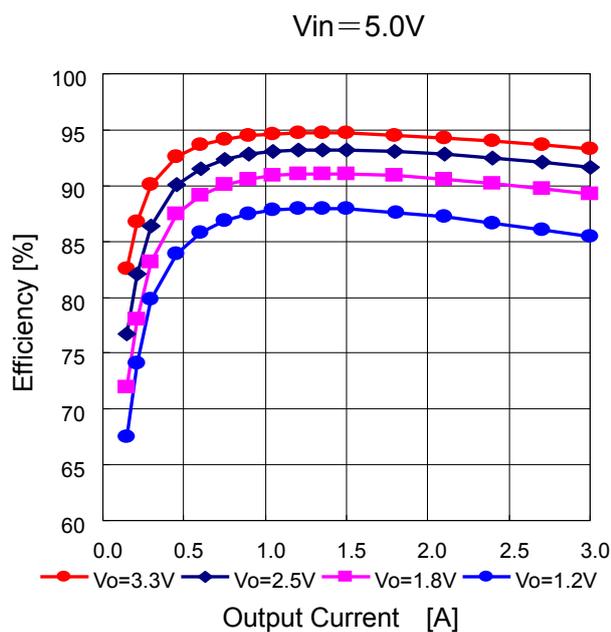
Vout(V)	Calculated R1 (Ω)	R1 example (Ω)
3.6	∞	Open
3.3	131.4k	130k+1.5k
2.5	22.82k	22k+820
1.8	6973	6.8k+180
1.5	3415	3.3k+120
1.2	747	680+68
1.1	0	Short



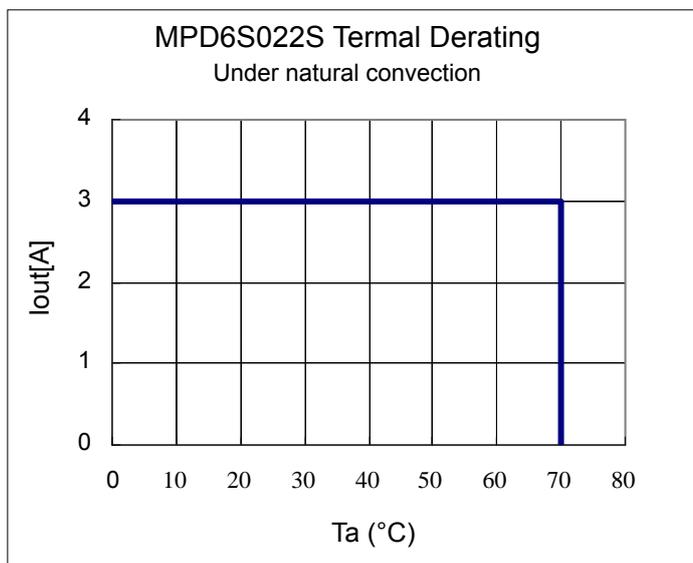
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■ Efficiency Characteristics



■ Thermal Derating



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