

# DC-DC Converter Short Form

## MPD6D20\*S (Isolated DC-DC Converter)

The MPD6D20\*S Series is 24V or 27V Input , Low height 0.3" , small size 1.57" x 1.18" as same area of a eighth brick , surface-mountable devices , fixed switching frequency of Isolated DC-DC Converter.

This series is pin compatibility to other Murata original DC-DC Converters of 48V input 10W,15W,20W series which are actually Japan De-facto Standard.



### ■ FEATURES

- Low Profile & Small Size:39.9x30.05x8.0mm
- Wide Input Voltage Range(18 to 36V)
- Wide Operating Ambient Temp:-40 to +85°C. with minimum power derating
- Input-Output Isolation Voltage(1.5kVdc)
- UL60950 recognized ,Self-declare CE mark

### ■ FUNCTIONS

- Over current Limit Inception
- Low voltage Protection
- Over voltage Protection
- Remote On/Off control
- Alarm signal Output
- Output Current multiplied up to 10 times with parallel operation

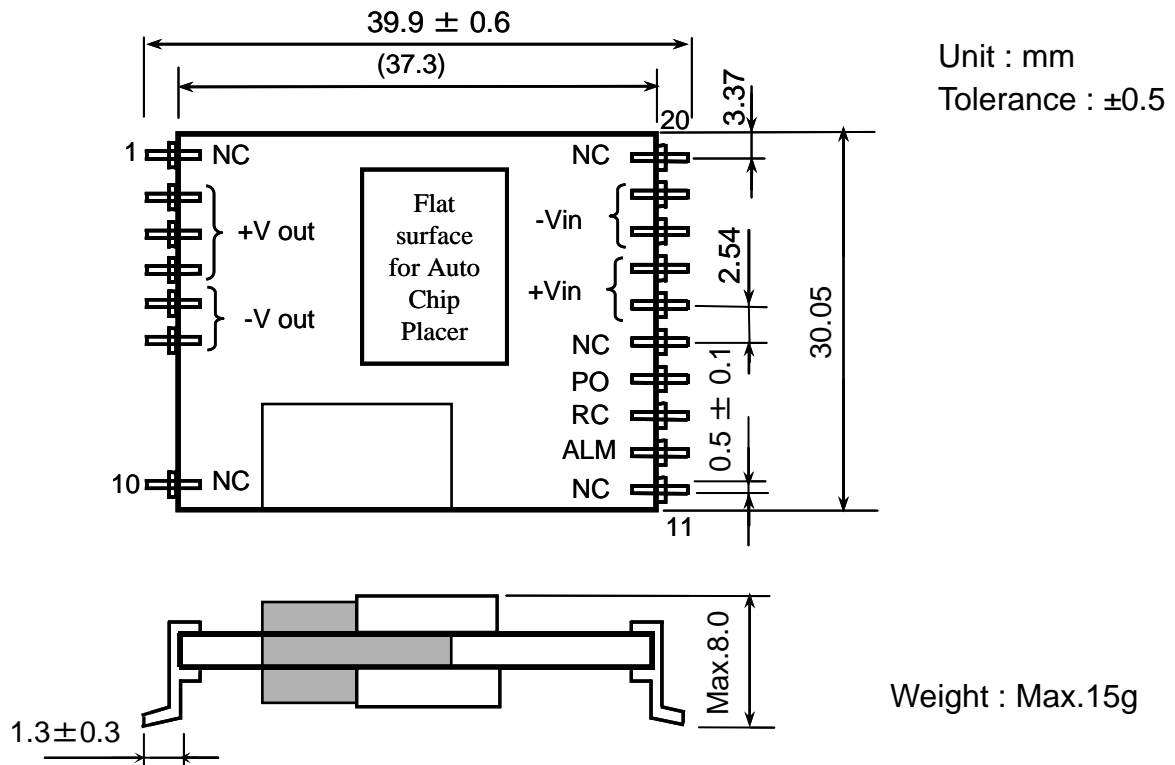
### ■ GENERAL SPECIFICATIONS

Item Model		MPD6D***S SERIES where *** is in below cell	
		207	209
Input	Input Voltage Range	18 to 36V (Continuous) Forced Air Convection 160LFM (0.8m/s)	
	Turn-on Input Voltage	16 to 18V	
	Turn-on/off Hysteresis (Min.)	1V	
Output	Output Voltage	3.3V	5.5V
	Output Voltage Tolerance	+5%,-3%	
	Nominal Output Current	9.0A	6.0A
	Overcurrent Limit Inception (Min.)	9.2A	6.2A
	Lowvoltage Protection(Max.)	90% of Nominal Output Voltage	
	Efficiency(typ)	91%	91%
	Output Ripple and Noise (Max.)	50mVp-p with $F_{BW}=100\text{MHz}$ 25mVp-p with $F_{BW}=20\text{MHz}$	
	Remote ON/OFF	ON :RC pin connected to -Vin or open OFF:RC pin connected to +Vin	
Isolation	Input - Output(Min.)	1500Vdc	

#### ⚠ 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



## ■ Pin assignment

Pin No.	Designation	Function
1,10,11,15,20	NC	Not Connected
2,3,4	+V out	+Output
5,6	-V out	-Output
12	ALM	Alarm output Note1
13	RC	Remote On/Off Control
14	PO	Parallel Operation Note2
16,17	+ Vin	+ Input
18,19	- Vin	- Input

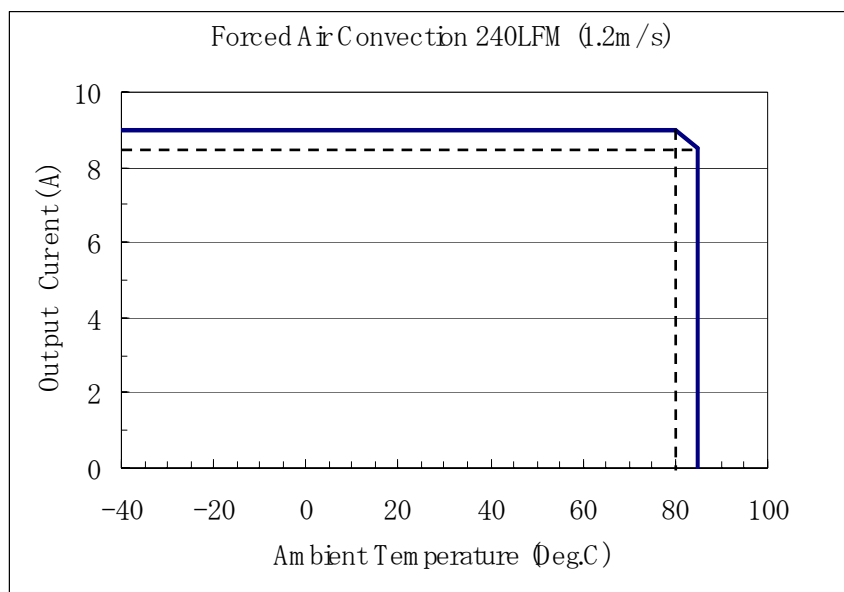
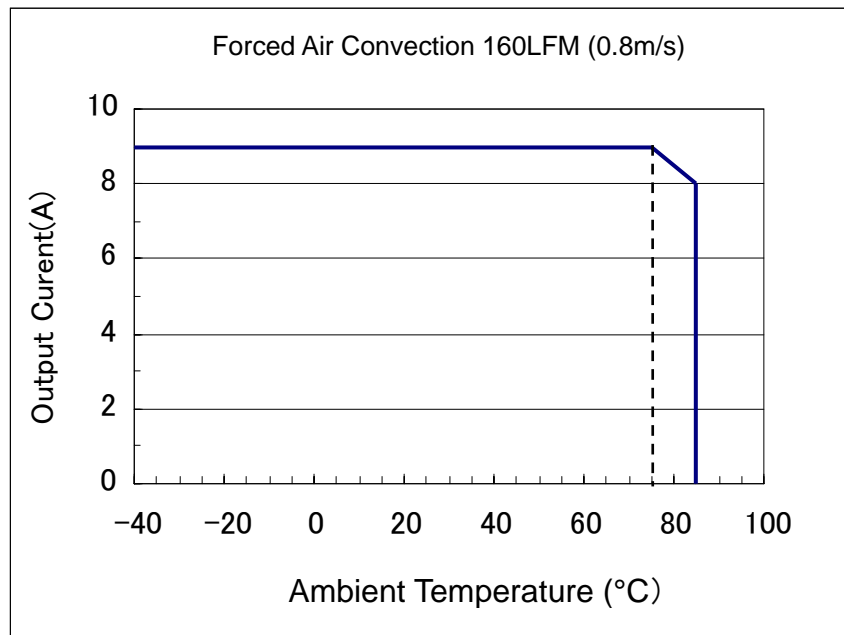
Note 1: Any DC-DC Converter halted by abnormality forces all DC-DC Converters, which are connected ALM pins to the others for parallel and/or multiple operation, to stop their operation.

Note 2: DC-DC Converters connected PO pins to the others can synchronize start timing for parallel and/or multiple operation.

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## ■ Typical Power De-rating(with Single unit operation) MPD6D207S

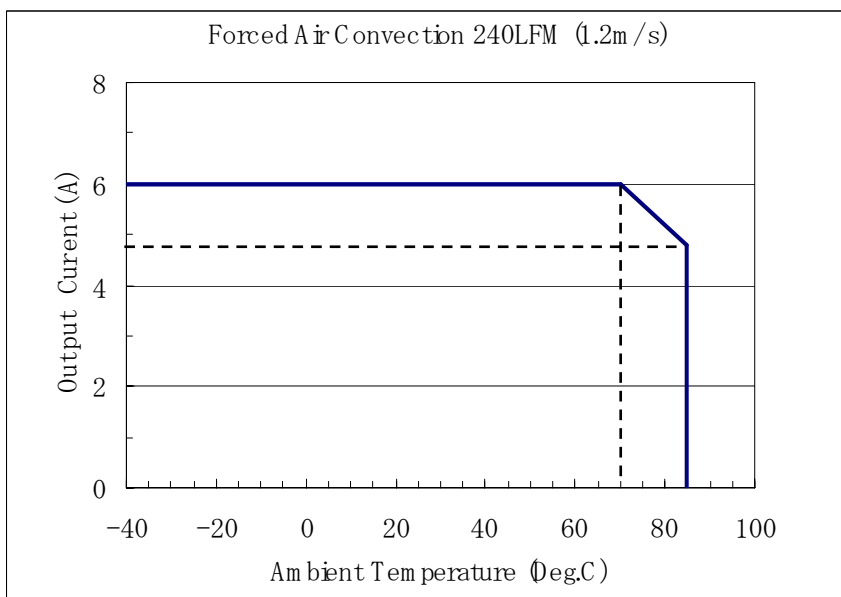
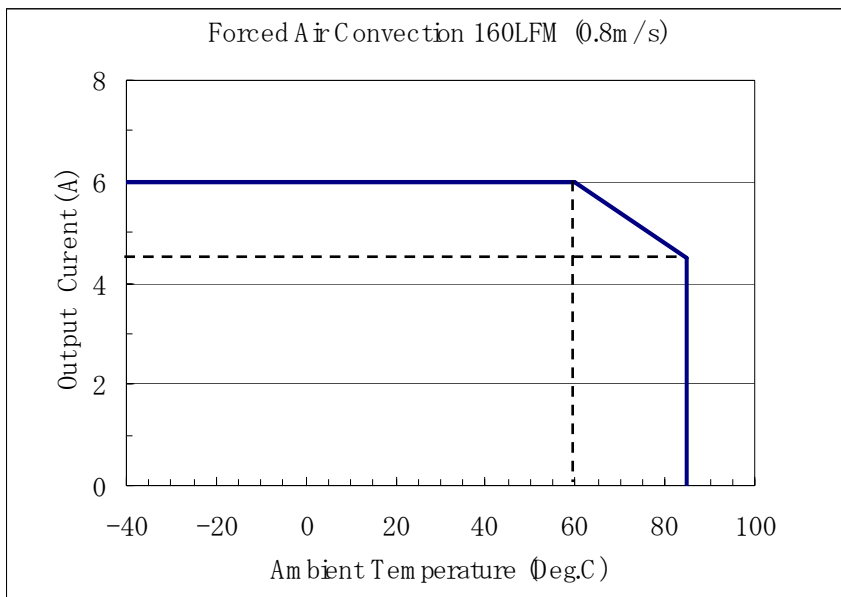


Notice: We would like to emphasize that these data are based on our experimental measurement. Please confirm that the maximum temperature of components mounted on a PCB substrate of the DC-DC Converter is 120°C or less in your application.

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## ■ Typical Power De-rating(with Single unit operation) MPD6D209S



Notice: We would like to emphasize that these data are based on our experimental measurement. Please confirm that the maximum temperature of components mounted on a PCB substrate of the DC-DC Converter is 120deg.C or less in your application.

## ■ Safety

UL60950 recognized, CE marking(LVD & EMC directive)



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