

# 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:39.9×30.05×8.0mm
- 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

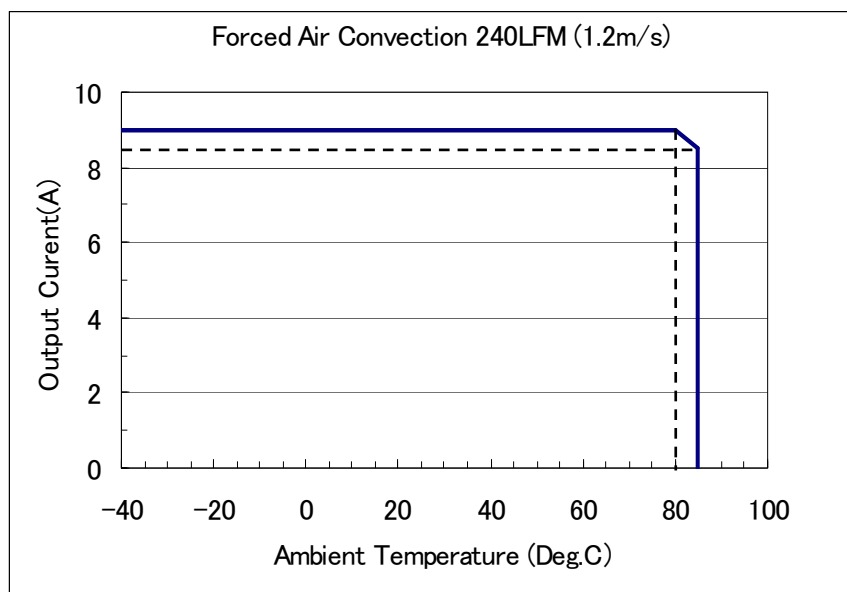
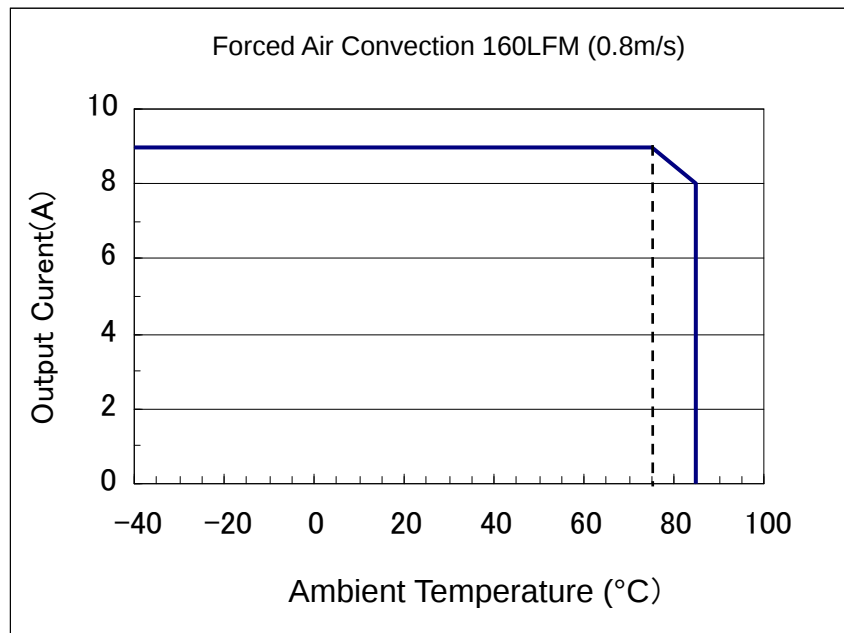
| Item<br>Model |                                    | MPD6D***S SERIES where *** is in below cell                               |      |
|---------------|------------------------------------|---------------------------------------------------------------------------|------|
|               |                                    | 207                                                                       | 209  |
| Input         | Input Voltage Range                | 18 to 36V (Continuous)<br>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 $F_{BW}=100\text{MHz}$<br>25mVp-p with $F_{BW}=20\text{MHz}$ |      |
|               | Remote ON/OFF                      | ON :RC pin connected to -Vin or open<br>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.

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

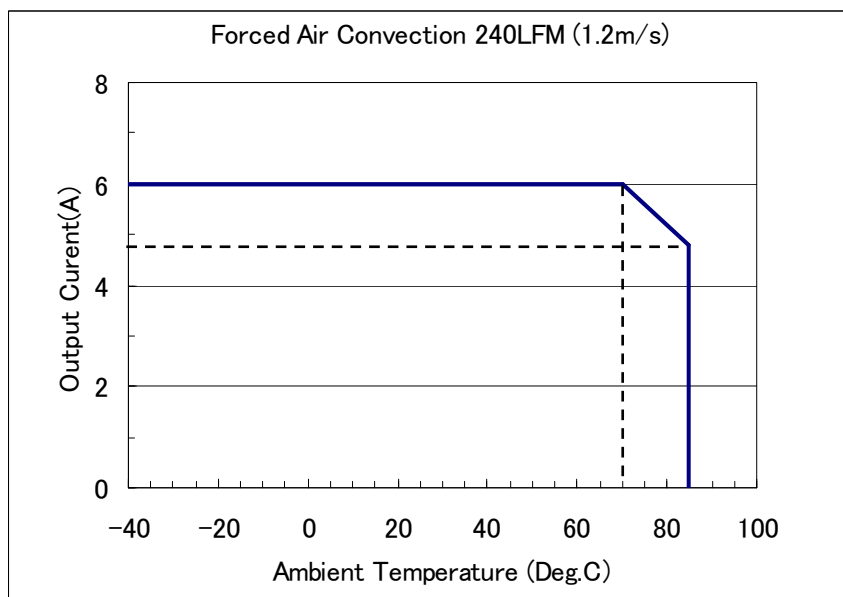
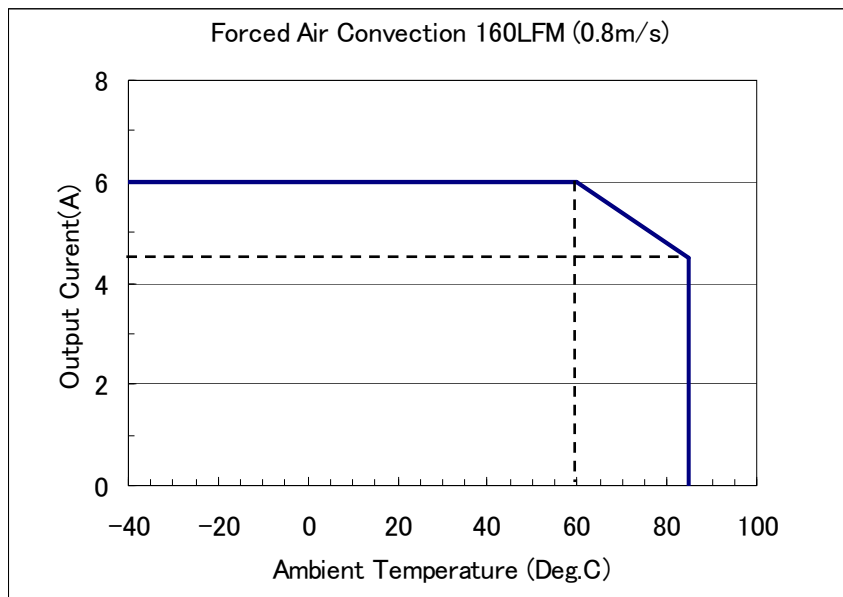


Notice: We would like to emphasize that these data are based on our experimental measurement. Please confirm that the maximum temperature of components mounted on a PCB substrate of the DC-DC Converter is 120°C or less in your application.

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



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## ■ Safety

UL60950 recognized, CE marking(LVD & EMC directive)



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