




**P Series**

**SD Memory Card, Industrial MLC Model**

■ **Product Outline**

P series are SDHC memory cards adopting built-in industrial MLC type NAND flash memory and is suitable for industrial applications. They are adequate for the applications such as automotive use, security camera, factory automation, broadcast equipment, handy terminal etc. They are formatted complying with SD card specification.

■ **Product Specification** (specifications and appearances may be changed without notice.)

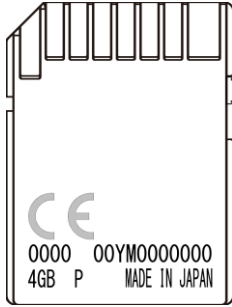
|                                |                                      | 4GB   | 8GB  | 16GB  |
|--------------------------------|--------------------------------------|---|--|---|
| <b>Appearance</b>              |                                      |  |  |  |
| <b>Part Number</b>             |                                      | <b>RP-SDPC04</b>  | <b>RP-SDPC08</b>   | <b>RP-SDPC16</b>  |
| Capacity                       | Available user data area capacity*1) | 3,955,195,904 byte  | 7,998,504,960 byte   | 16,194,198,280 byte   |
| Compliant Specification        | SD Physical Specification            | Ver. 3.01   |  |   |
|                                | SD speed class                       | CLASS 4   |  |   |
|                                | UHS speed grade                      | not supported   |  |   |
|                                | Speed mode                           | High Speed, Default Speed   |  |   |
| Backside mark                  | Control Code                         | D0BC  |  |   |
| Read/Write Performance (up to) | Read                                 | 22MB/s (High Speed)   | 22MB/s (High Speed)  | 22MB/s (High Speed)   |
|                                | Write                                | 12MB/s (High Speed)   | 12MB/s (High Speed)  | 12MB/s (High Speed)   |
| Absolute Maximum Ratings       | Supply Voltage                       | Min: -0.3V Max: 4.6V  |  |   |
|                                | Input Voltage                        | Min: -0.3V Max: VDD+0.3V  |  |   |
|                                | Output Voltage                       | Min: -0.3V Max: VDD+0.3V  |  |   |
|                                | Output Current                       | Min: -24mA Max: 24mA  |  |   |
| Environmental Specification    | Operating Temperature                | -40 degree C to 85 degree C   |  |   |
|                                | Storage Temperature                  | -40 degree C to 85 degree C   |  |   |
|                                | Humidity                             | 5 % to 95 %   |  |   |
|                                | Vibration                            | 15 Gpp  |  |   |
|                                | Shock                                | 1000 G  |  |   |
|                                | Mating Cycles                        | 10,000 cycles   |  |   |

\*1) Free area capacity after formatted

Absolute maximum ratings are the values of limitation, which do not damage the card. Those values do not define the operational range.

Products comply with EU RoHS directives.

## ■ Laser Mark on the Back-side (example; 4GB)



“0000” Control Code (Defined as product parts combination)  
“00YM0000000” Serial Number  
Y Last digit of Manufacture year  
M Manufacture month (January->A, February->B, )  
“4GB” Card Capacity  
“P” Series name  
“MADE IN JAPAN” Country of origin

## ■ System Reliability

- a. Powerful error detect and corrective function
- b. Static wear leveling
- c. Data recovery at power failure in writing
- d. Automatic refresh function
- e. Bad block management

## ■ Notice and Caution

If you think about the usage for which special quality or reliability of the products is needed and failure or malfunction of the products may directly threaten life or injury for the special usage (aeronautic or cosmic usage, military usage, combustion machine, life support applications or safety applications), please counsel with our contacts in advance.

Write frequency and storage temperature will affect data retention time. Please make a backup for important data.

## ■ Warranty

If the product cannot be used because of failure which is determined as defect in design or in production of the product, it is replaced by same product or equivalent one within 12 months from the delivery date of product.