




## FX Series

### SD Memory Card, Industrial SLC Model

#### ■ Product Outline

FX series are SD/SDHC memory cards adopting built-in industrial SLC type NAND flash memory and is suitable for industrial applications where frequent writes are required. They are adequate for the applications, where large data load are written, such as servers, security camera, factory automation, broadcast equipment and automotive drive recorders. They are formatted complying with SD card specification.

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

Image Part Number		2GB	4GB	8GB
		 RP-SDF02G	 RP-SDF04G	 RP-SDF08G
<b>Capacity</b>	Available user data area capacity <sup>1</sup>	2,014,445,568 byte	3,955,195,904 byte	8,048,836,608 byte
<b>Compliant Specification</b>	SD Physical Specification	Ver. 3.01		
	SD Speed Class	CLASS 6	CLASS 10	
	UHS Speed Grade	-	U1	
	Speed mode	High Speed, Default Speed	High Speed, Default Speed SDR104, SDR50, SDR25, SDR12	
<b>Backside mark</b>	Control code	R2B9		
<b>Read/Write Performance (up to)</b>	Read	22 MB/s (High Speed)	90 MB/s (SDR104)	95 MB/s (SDR104)
	Write	20 MB/s (High Speed)	40 MB/s (SDR104)	80 MB/s (SDR104)
<b>Absolute Ratings</b>	Supply Voltage	-0.3V to 4.6V (Min - Max)		
	Input Voltage	-0.3V to +0.3VDD (Min - Max)		
	Output Voltage	-0.3V to +0.3VDD (Min - Max)		
	Output Current	-24mA to 24 mA (Min - Max)		
<b>Environmental Specification</b>	Operating Temperature	-40°C to 85°C		
	Storage Temperature	-40°C to 85°C		
	Humidity	5% to 95%		
	Vibration	15 Gp/p		
	Shock	1000 G		
	Mating Cycles	10,000 cycles		

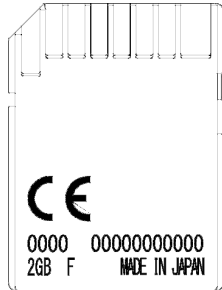
<sup>1</sup>Free area capacity after formatted.

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; 2GB)**



“0000” Control Code (Defined as product parts combination)  
“00YM0000000” Serial Number  
Y Last digit of Manufacture year  
M Manufacture month (January->A, February->B, )  
“2GB” Card Capacity  
“F” Series name  
“MADE IN JAPAN” Country of origin

■ **System Reliability**

- Powerful error detect and corrective function
- Static wear leveling
- Data recovery at power failure in writing
- Automatic refresh function to prevent uncorrectable error
- Bad block management

■ **Notice and Caution**

In applications where very unique product quality or reliability 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 production of the product, it is replaced by same product or equivalent one within 12 months from the delivery date of product.