

[2D NAND Storage]

SD Card / Micro SD Card



MMRD4



MURD4



GENERAL INFORMATION

TYPE	SD MEMORY CARD (SD / SDHC)		microSD MEMORY CARD (SD / SDHC)	
INTERFACE DATA TRANSFER MODE	SD 3.0, UHS-I/Class 10 (SDHC) , Class 6 (SD)			
CONNECTOR	SD		microSD	
OUTLINE DIMENSIONS	32 x 24 x 2.1 mm		15 x 11 x 0.7 / 1 mm	
SERIES	MMRD4		MURD4	
CONTROLLER TYPE	TDK GBDriver RD4			
FLASH TYPE	SLC	pSLC	SLC	pSLC
DENSITY RANGE	512 MB - 32 GB	4 GB - 32 GB	512 MB - 4 GB	4 GB - 32 GB
DATA RETENTION	10 years @ life begin-10% 1 year @ life end			
ENDURANCE ENTERPRISE WL	512 MB ~ 2 GB: 50,000 P/E Cycles 4 GB ~ 32 GB: 100,000 P/E Cycles *Flash Block Level	20,000 P/E Cycles *Flash Block Level	50,000 P/E Cycles *Flash Block Level	20,000 P/E Cycles *Flash Block Level

TEMPERATURE

OPERATING TEMPERATURE	Commercial: -25°C to +85°C Industrial: -40°C to +85°C
STORAGE TEMPERATURE	-40°C to +85°C

PERFORMANCE

Read (max.)	75 MByte/sec	70 MByte/sec	75 MByte/sec	70 MByte/sec
Write (max.)	50 MByte/sec	67 MByte/sec	50 MByte/sec	67 MByte/sec

ROBUSTNESS

MTBF	≥ 3,000,000 hours
SHOCK	1000G, 0.5ms
VIBRATION	15G, 10-2000Hz
HUMIDITY	0 to 90 % RH (No condensation)

ELECTRICAL DATA

VOLTAGE	2.7 ~ 3.6 V
POWER CONSUMPTION (*RT)	- Read: 100mA max. - Write: 100mA max. - Stand-by: 0.4mA

FEATURE LIST

FEATURES & TOOLS	- In-House Designed Controller - DRAM-less Design - Power Fail Data Safety - Global static wear leveling - SMART	
PART NUMBER	MMRD4xxxxVxxxA00ABA0	MURD4xxxxVxxxA00ABA0