

## 2.5" SATA SSD


SDE1B:9.5mm



SDE1B:7mm



### GENERAL INFORMATION

TYPE	2.5 inch SATA SSD (9mm)		2.5 inch SATA SSD (7mm)	
INTERFACE	Serial ATA Revision 3.1			
DATA TRANSFER MODE	SATA 1.5Gbps, 3.0Gbps, 6.0Gbps			
CONNECTOR	15 + 7 pin Serial ATA			
OUTLINE DIMENSIONS	100.0 x 69.84 x 9.5 mm		100.0 x 69.85 x 7.0 mm	
SERIES	SDE1B			
CONTROLLER TYPE	 TDK GBDriver GS1			
FLASH TYPE	SLC	pSLC/MLC	SLC	pSLC/MLC
DENSITY RANGE	16 GB - 128 GB	pSLC:16GB-256GB MLC:32GB-512GB	16 GB - 128 GB	pSLC:16GB-256GB MLC:32GB-512GB
DATA RETENTION	10 years @ life begin-10% 1 year @ life end			
ENDURANCE ENTERPRISE WL	100,000 P/E Cycles *Flash Block Level	pSLC:20,000P/ECycles MLC:3,000P/ECycles *Flash Block Level	100,000 P/E Cycles *Flash Block Level	pSLC:20,000P/ECycles MLC:3,000P/ECycles *Flash Block Level

### TEMPERATURE

OPERATING TEMPERATURE	Commercial: 0°C to +70°C Industrial: -40°C to +85°C
STORAGE TEMPERATURE	Commercial: -25°C to +85°C Industrial: -40°C to +85°C

### PERFORMANCE

Read (max.)	420 MByte/sec	pSLC:430MByte/sec MLC:365MByte/sec	420 MByte/sec	pSLC:430MByte/sec MLC:365MByte/sec
Write (max.)	305 MByte/sec	pSLC:325MByte/sec MLC:235MByte/sec	305 MByte/sec	pSLC:325MByte/sec MLC:235MByte/sec

### ROBUSTNESS

MTBF	≥ 2,000,000 hours
SHOCK	1,000G,1.0ms
VIBRATION	20G,10-2000Hz
HUMIDITY	0 to 90 % RH (No condensation)

### ELECTRICAL DATA

VOLTAGE	5 V ± 10 %
POWER CONSUMPTION	<ul style="list-style-type: none"> <li>- Read: 320mA max.</li> <li>- Write: 600mA max.</li> <li>- Slumber: less than 100mA</li> </ul>

### FEATURE LIST

FEATURES & TOOLS	<ul style="list-style-type: none"> <li>- In-House Designed Controller (HW/FW)               <ul style="list-style-type: none"> <li>- Power Fail Data Safety</li> <li>- Power Back-up Circuit</li> </ul> </li> <li>- Global static wear leveling               <ul style="list-style-type: none"> <li>- SMART</li> <li>- NCQ, TRIM</li> </ul> </li> <li>- AES 128/256bit encryption</li> </ul>			
PART NUMBER	SDE1BxxxxTXXxB00ESA0	SDE1BxxxxTXXxB00ESA0	SDE1BxxxxTXXxBA0ESA0	SDE1BxxxxTXXxBA0ESA0