

## 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<br>MLC:32GB-512GB                                | 16 GB - 128 GB                           | pSLC:16GB-256GB<br>MLC:32GB-512GB                                |
| DATA RETENTION             | 10 years @ life begin-10%<br>1 year @ life end   |  |  |  |
| ENDURANCE<br>ENTERPRISE WL | 100,000 P/E Cycles<br>*Flash Block Level   | pSLC:20,000P/ECycles<br>MLC:3,000P/ECycles<br>*Flash Block Level | 100,000 P/E Cycles<br>*Flash Block Level | pSLC:20,000P/ECycles<br>MLC:3,000P/ECycles<br>*Flash Block Level |

### TEMPERATURE

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

### PERFORMANCE

|              |               |                                       |               |                                       |
|--------------|---------------|---------------------------------------|---------------|---------------------------------------|
| Read (max.)  | 420 MByte/sec | pSLC:430MByte/sec<br>MLC:365MByte/sec | 420 MByte/sec | pSLC:430MByte/sec<br>MLC:365MByte/sec |
| Write (max.) | 305 MByte/sec | pSLC:325MByte/sec<br>MLC:235MByte/sec | 305 MByte/sec | pSLC:325MByte/sec<br>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 | SDE1BxxxxTXXxB00ESA0 | SDE1BxxxxTXXxB00ESA0 |