

# Half Slim

## SHE1B



### GENERAL INFORMATION

|                            |  |  |
|----------------------------|--|--|
| TYPE                       | Half Slim  |  |
| INTERFACE                  | Serial ATA Revision 3.1  |  |
| DATA TRANSFER MODE         | SATA 1.5Gbps, 3.0Gbps, 6.0Gbps   |  |
| CONNECTOR                  | 15 + 7 pin Serial ATA  |  |
| OUTLINE DIMENSIONS         | 54 x 39 mm   |  |
| SERIES                     | SHE1B  |  |
| CONTROLLER TYPE            |  TDK GBDriver GS1 |  |
| FLASH TYPE                 | SLC  | pSLC/MLC   |
| DENSITY RANGE              | 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 |

### 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.)  | 340 MByte/sec | pSLC:400 MByte/sec<br>MLC:320 MByte/sec |
| Write (max.) | 115 MByte/sec | pSLC:165 MByte/sec<br>MLC:75 MByte/sec  |

### ROBUSTNESS

|           |                                |
|-----------|--------------------------------|
| MTBF      | ≥ 2,000,000 hours              |
| SHOCK     | 1500G,0.5ms                    |
| 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: 250mA max.</li> <li>- Write: 270mA 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      | SHE1BxxxxTXDxB00SSA0  |