

# Apacer

The Most **Reliable**  
Storage For Industries

**SV25P-25**



## SV25P-25

### Overview

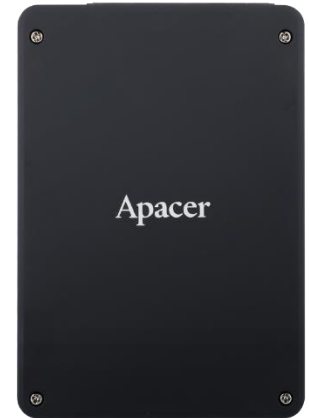
Apacer's SV25P-25 is a well-balanced solid-state disk (SSD) drive with a standard form factor and excellent performance. Designed with a SATA 6 Gb/s interface, SV25P-25 fully complies with the latest SATA Revision 3.2 interface specifications and delivers exceptional read/write speeds, making it the ideal companion for heavy-duty industrial or server operations.

Utilizing 3D NAND technology to achieve higher capacities of up to 1920GB and providing superior power efficiency compared to 2D NAND, SV25P-25 is equipped with a robust SATA controller that supports on-the-module ECC and an efficient wear leveling scheme. It also features an LDPC (Low Density Parity Check) ECC engine to enhance SSD endurance and data reliability.

Featuring CorePower technology, SV25P-25 guarantees the integrity and stability of data transmission in the event of an unexpected power loss. This is achieved through a backup power supply featuring tantalum capacitors, allowing sufficient time to transfer all cached data to NAND flash. Furthermore, SV25P-25 is outfitted with a built-in thermal sensor to monitor the SSD temperature via S.M.A.R.T commands, preventing overheating. For highly-intensive applications, End-to-End Data Protection guarantees data integrity at multiple points along the transmission path, enabling dependable data transfers.

Security-wise, Advanced Encryption Standard (AES) ensures data security and provides users with peace of mind knowing their data is safeguarded against unauthorized use at all times. SV25P-25 also adopts the latest page mapping file translation layer and comes with various implementations including flash block management, TRIM, ATA secure erase, power saving modes, device sleep, Hyper Cache technology, over-provisioning, DataRAID, and SMART Read Refresh.

With exceptional performance, trustable reliability, and enhanced data protection, SV25P-25 is definitely the ideal storage or cache solution for a variety of applications ranging from industrial, imaging, computing to enterprise markets.



## Feature

- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T.
- ATA Secure Erase
- SATA Power Management
- Device Sleep
- TRIM
- Hyper Cache Technology
- Over-provisioning
- DataRAID
- SMART Read Refresh

## Specifications

<b>Model</b>	SV25P-25
<b>Interface</b>	SATA 3.2 (6Gb/s)
<b>Connector</b>	(7+15) pin
<b>Form Factor</b>	2.5"
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	120~1920GB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 560
<b>Sustained Write Performance (MB/sec)</b>	Up to 510
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPS (4K Random Write)</b>	71K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Wide Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-55°C to 100°C
<b>Thermal sensor</b>	Yes
<b>Shock</b>	Operation: 50G/11ms (compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (compliant with MIL-STD-883K)
<b>Vibration</b>	Operation: 7.69 GRMS, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 4.02 GRMS, 15~2000 Hz/random (compliant with MIL-STD-810G)
<b>Operating Voltage</b>	5.0 V ± 5%
<b>Power Consumption</b>	Active mode: 285 mA / Idle mode: 70 mA
<b>Dimension (L x W x H )</b>	7mm: 100.00 x 69.85 x 6.90mm
<b>MTBF (hours)</b>	>3,000,000

## Mechanical Specification

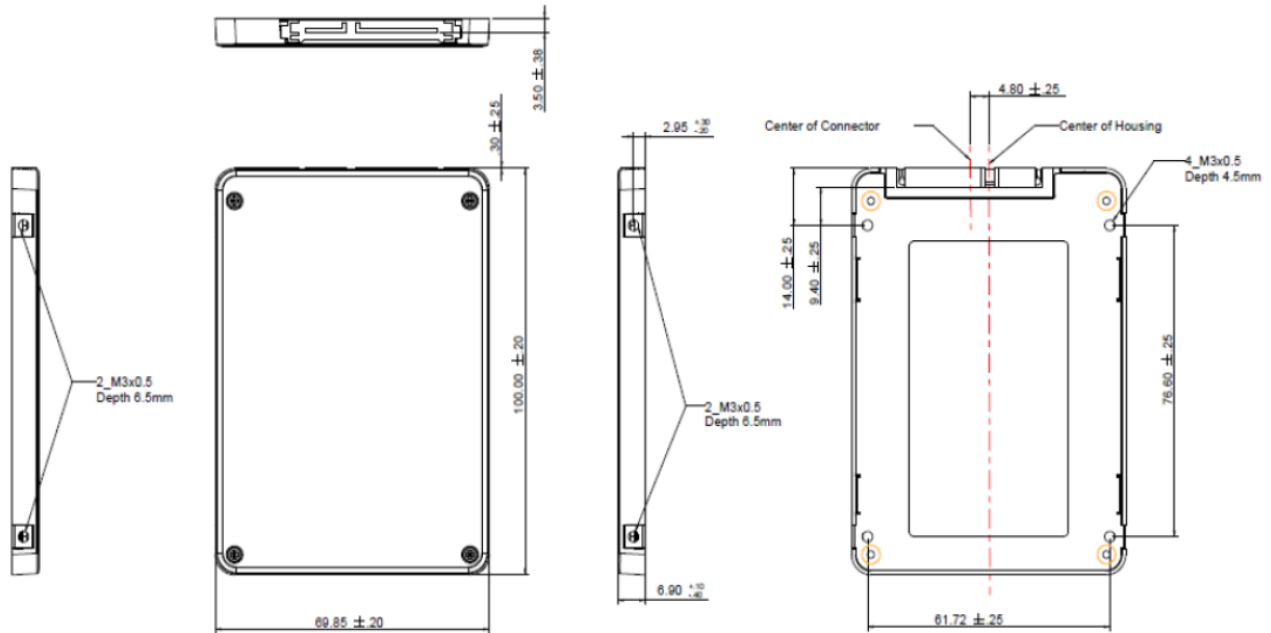


Figure 9-1 Physical Dimensions

Unit: mm

For more information,  
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