The Most **Reliable** Storage For Industries

SV25V-25



Overview

Apacer SV25V-25 is a compact, high-performance SATA III solid-state drive designed for embedded systems and industrial applications that require reliable storage with advanced data protection. Compliant with SATA Revision 3.2 and built with cutting-edge NAND flash management technologies, SV25V-25 supports LDPC ECC, bad block management, global wear leveling, page mapping, TRIM, Hyper Cache technology, and over-provisioning to enhance endurance, performance, and data integrity.

To ensure power stability in mission-critical environments, SV25V-25 is equipped with Apacer's CoreVolt 2 technology. This intelligent voltage monitoring system detects real-time fluctuations in power supply and proactively logs abnormal events into S.M.A.R.T. data, including via a dedicated SMART ID203 attribute. Administrators can receive alerts through SSDWidget 2.0, enabling timely diagnostics and preventive action, ultimately enhancing system reliability.

The SSD also features DataDefenderTM Plus, a robust multi-layer protection system that ensures critical data is preserved during sudden power losses. By coordinating hardware, firmware, and software safeguards, this technology protects data in-flight and maintains drive stability in challenging operating conditions.

With added support for AES encryption, End-to-End Data Protection, and a built-in thermal sensor, Apacer SV25V-25 offers a comprehensive storage solution engineered for reliability, security, and operational efficiency.

SV25V-25



Features

- CoreVolt 2 Technology
- Low-Density Parity-Check (LDPC) Code
- Bad Block Management
- Global Wear Leveling
- Flash Translation Layer: Page Mapping
- TRIM
- DataDefenderTM Plus
- ATA Secure Erase
- SATA Power Management
- Device Sleep
- Hyper Cache Technology
- Over-provisioning
- DataRAIDTM
- SMART Read RefreshTM
- S.M.A.R.T.

Specifications

Model Name	SV25V-25
Interface	SATA 3.2 (6Gb/s)
Connector	(7+15) pin3-pin
Form Factor	2.5"
NAND Flash Type	3D TLC
Capacity	120GB-1920GB
External DRAM	No
Sustained Read	
Performance (MB/sec.)	Up to 555
Sustained Write	Up to 500
Performance (MB/sec.)	ορ to 300
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	64K
Standard Operating	0 ~ + 70
Temperature (°C)	3 . 78
Extended Operating	-40°C to 85°C
Temperature (°C)	
Storage Temperature (°C)	-55 ~ + 1 00
Housing	-
Thermal Sensor	Yes
Shock	Operation: Acceleration, 50(G)/11(ms)/half sine (compliant with MIL-STD-202G) Acceleration, 1500(G)/0.5(ms)/half sine (compliant with MIL-STD-883K)
Vibration	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)
Operating Voltage	Max voltage: 5.49V/Min voltage: 4.59V
Power Consumption	Active mode: 280 mA / Idle mode: 60 mA
Dimension (L x W x H)	7mm: 100.00 x 69.85 x 6.90mm
MTBF (Hours)	>3,000,000

Mechanical Specifications

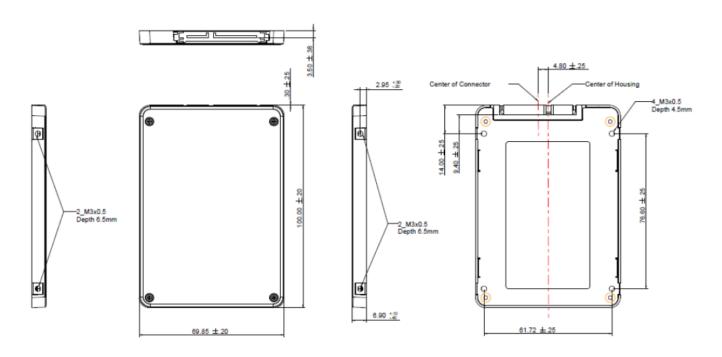


Figure 9-1 Physical Dimensions

For more information, contact your Apacer representative

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