

**HDD**

**> MQ01ABDxxxV SERIES  
VIDEO STREAM HDD**



**> KEY FEATURES**

- Up to 1 TB of Storage Capacity
- 2.5-inch, Small Form Factor
- 5,400 rpm
- SATA up to 3.0 Gbit/s
- Advanced Format (AF) 512e Sector Length
- Low Power Consumption Compared to 3.5-inch Form Factor (DT01ABAxV series)
- 17 dB (Idle)

**> APPLICATIONS**

- Video Editing Systems
- Set-Top-Box (STB)
- Digital Video Recorders (DVR)
- Network Video Recorders (NVR)

**> MAIN SPECIFICATIONS**

Model Number		MQ01ABD100V	MQ01ABD050V	MQ01ABD032V	MQ01ABD025V
Interface		Serial ATA 2.6 / ATA-8			
Formatted Capacity		1 TB	500 GB	320 GB	250 GB
Performance	Interface Speed	3.0 Gbit/s Max.			
	Rotation Speed	5,400 rpm			
	Average Latency Time	5.56 ms			
	Buffer Size	16 / 8 MiB			
Logical Data Block Length	MQ01ABDxxxV	HOST: 512 B, DISK: 4,096 B			
Supply Voltage	Allowable Voltage	5 V ± 5%			
Power Consumption	Read / Write	1.5 W Typ.			
	Low Power Idle	0.55 W Typ.			
Acoustics (Sound Power)	Idle	23 dB	17 dB		
	Seek	24 dB	19 dB		

**> RELIABILITY**

Model Number	MQ01ABDxxxV
Non-recoverable Error Rate	1 error per 10 <sup>14</sup> bits read

## > MECHANICAL SPECIFICATIONS

Model Number	MQ01ABD100V	MQ01ABD050V	MQ01ABD032V	MQ01ABD025V
Height	9.5 mm Max..			
Width	69.85 mm			
Length	100.0 mm Max.			
Weight	117 g Max.	107 g Max.		

## > ENVIRONMENTAL LIMITS

Item		Specification
Temperature	Operating	0 °C to 55 °C
	Non-Operating	- 40 °C to 70 °C
Humidity	Operating	8 % to 90 % R.H. (No condensation)
	Non-Operating	8 % to 90 % R.H. (No condensation)
Shock	Operating	3,920 m/s <sup>2</sup> {400 G} (2 ms half sine wave)
	Non-Operating	8,820 m/s <sup>2</sup> {900 G} (1 ms half sine wave )
Vibration	Operating	9.8 m/s <sup>2</sup> {1.0 G} (5 to 500Hz)
	Non-Operating	49 m/s <sup>2</sup> {5.0 G} (15 to 500Hz)
Altitude	Operating	- 300 m to +3,000 m
	Non-Operating	- 300 m to +12,000 m

Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2<sup>30</sup> = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

A kibibyte (KiB) means 2<sup>10</sup>, or 1,024 bytes, a mebibyte (MiB) means 2<sup>20</sup>, or 1,048,576 bytes, and a gibibyte (GiB) means 2<sup>30</sup>, or 1,073,471,824 bytes.

Toshiba Semiconductor & Storage Products Company defines "RoHS-Compatible" products as products that either (i) contain no more than a maximum concentration value of 0.1% by weight in Homogeneous Materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) and of 0.01% by weight in Homogeneous Materials for cadmium; or (ii) fall within any of the application exemptions set forth in the Annex to the RoHS Directive (Directive 2011/65/EC of the European Parliament and of the Council of 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment). "Homogeneous Material" means a material of uniform composition that cannot be mechanically disjointed (meaning separated, in principle, by mechanical actions such as unscrewing, cutting, crushing, grinding and/or abrasive processes) into different materials. Examples of "Homogeneous Materials" would be individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.

Read and write speed may vary depending on the host device, read and write conditions, and file size.

"2.5-inch" and "3.5-inch" mean the form factor of HDDs or SSDs. They do not indicate drive's physical size.

Subject to Change: While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, and availability are all subject to change without notice.

Before creating and producing designs and using, customers must also refer to and comply with the latest versions of all relevant TOSHIBA information and the instructions for the application that Product will be used with or for.