V60 Series

SpinPoint™

MODEL	SV0221H	SV0301H	SV0412H	SV0602H	SV0813H	SV1204H
Capacity[1]	20GB	30GB	40GB	60GB	80GB	120GB
Heads	1	1	2	2	3	4
Disks	1	1	1	1	2	2

FEATURES

- 60GB Formatted Capacity Per Disk
- 5,400 rpm Spindle Speed
- High Speed Dual Digital Signal Processor (DSP) Based Architecture
- Ultra DMA-100 Compatible
- 8.9ms Average Seek Time
- 576-bit Reed Solomon OTF Error Corection Code
- S.M.A.R.T. Compliant
- ATA Security Mode Feature Set
- ATA Host Protected Area Feature Set
- ATA Automatic Acoustic Management Feature Set
- NoiseGuard™
- SilentSeek™

DRIVE CONFIGURATION

Interface	Ultra ATA-100
Buffer DRAM Size[2]	2048 Kbytes
Bytes per Sector	512

PERFORMANCE SPECIFICATIONS

Read Seek Time (typical)	
Track to Track	0.8 ms
Average	8.9 ms
Full Stroke	17.5 ms
Average Latency	5.56 ms
Rotational Speed	5,400 rpm
Data Transfer Rate	
Media to/from Buffer (max.)	498 Mbits/sec
Buffer to/from Host (max.)	100 MB/sec
Drive Ready Time (typical)	6 sec

RELIABILITY SPECIFICATIONS

Non-recoverable Read Error	1 sector in 10^{14} bits
MTBF	500,000 POH
Start/Stop Cycles (Ambient)	50,000
Component Design Life	5 years

ACOUSTICS (AVERAGE SOUND POWER)

Idle	2.9 Bel
Random Read/Write	3.1 Bel

ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating	5 ~ 55 °C
Non-operating	-40 ~ 70 °C
Thermal Gradient (max.)	20°C/hr
Humidity (non-condensing)	
Operating	5 ~ 90 %
Non-operating	5 ~ 95 %
Linear Shock (1/2 sine pulse)	
Operating, 2ms	63 G
Non-operating, 2ms	350 G
Vibration (swept sine, 1 octave per minute)	
Operating	
5 ~ 21 Hz	0.034" (double amplitude)
21 ~ 300 Hz	1.5 Gp-p
Non-operating	
5 ~ 21 Hz	0.195" (double amplitude)
21 ~ 500 Hz	8 Gp-p
Altitude (relative to sea level)	
Operating	-650 to 10,000 feet
Non-operating	-1,000 to 40,000 feet

POWER REQUIREMENTS

Voltage	+5V±5%, +12V±10%
Spin Up Current (max.)	750 / 1800 mA
Seek (typical)	7.0 W
Read/Write (typical)	5.0 W
Idle (typical)	5.0 W
Standby (typical)	0.7 W
Sleep (typical)	0.7 W

PHYSICAL DIMENSION

Height	1 in
Width	4 in
Depth	5.75 in
Weight	1.5 lb

Specifications are subject to change without notice.

[1] 1MB = 1,000,000 Bytes.   1GB = 1,000,000,000 Bytes
[2] Upper 100 KB used for firmware

SAMSUNG