

V80CE Series



CAPACITY ^{†1}	80GB	120GB	160GB
MODEL	SV0802E	SV1203E	SV1604E
HEADS	2	3	4
DISKS	1	2	2

FEATURES

- 80GB formatted capacity per disk
- Ultra ATA-100 interface
- ATA S.M.A.R.T. compliant
- ATA host protected area feature set
- ATA Automatic Acoustic Management feature set
- ATA 48-bit address feature set
- NoiseGuard™ technology
- SilentSeek™ technology
- Fluid Dynamic Bearing spindle motor technology
- Thermal monitoring system
- ATA security mode Feature Set
- Lock'On Drive™ (Optional AV security feature) support
- Enhanced Auto Reassign
- Low spin up current technology

DRIVE CONFIGURATION

Interface	UDMA100
Buffer DRAM Size ^{†2}	2 MB
Bytes per Sector	512

PERFORMANCE SPECIFICATIONS

Read Seek Time (typ.)	
Track to Track	0.8 ms
Average	12 ms
Full Stroke	23 ms
Average Latency	5.56 ms
Rotational Speed	5,400 rpm
Data Transfer Rate	
Media to/from Buffer (max.)	562 Mbits/sec
Buffer to/from Host (max.)	100 Mbytes/sec
Drive Ready Time (typ.)	7 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	2.30 Bel
Random Read/Write	2.40 Bel

ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating	0 ~ 60 °C
Non-operating	-40 ~ 70 °C
Thermal Gradient (max.)	20°C/hr
Humidity (non-condensing)	
Operating	8 ~ 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	-1,000 to 10,000 feet
Non-operating	-1,000 to 40,000 feet

POWER REQUIREMENTS

Voltage	+5V±5%, +12V±10%
Spin Up Current (max.)	670 / 1850 mA
Seek ^{†3} (typ.)	7.2 W
Read/Write On-Track (typ.)	5.9 W
Idle (typ.)	5.2 W
Standby (typ.)	0.4 W
Sleep (typ.)	0.4 W

PHYSICAL DIMENSION

Height	1 in
Width	4 in
Depth	5.75 in
Weight	1.4 lb

Specifications are subject to change without notice.

^{†1} 1MB=1,000,000 Bytes 1GB=1,000,000,000 Bytes

^{†2} Upper 386 KB is used for firmware

^{†3} 30% duty cycle, random seek

