

HERCULES-PB Series

Industrial SLC USB 2.0 Flash Disk Generation 5L



Product Feature

- SLC - NAND type flash technology
- Semi-metal casing design
- Comply with Microsoft Vista Ready-Boost® requirements
- RoHS & REACH compliant
- Capacity from 16GB up to 32GB

Product Specification

Compatibility

- ▶ USB 2.0 Hi-Speed and USB1.1 Full Speed compatible interface

Flash technology

- ▶ SLC-NAND type flash memory

Performance

Data transfer rate ▶ USB 2.0 supports transfer rates up to 480 Mbps (60MB/s)

Sequential read ▶ 27.5 MB/sec (Max.)

Sequential write ▶ 23.9 MB/sec (Max.)

Environmental specification

Operating temp. ▶ STD. 0°C~70°C/IND. -40°C~+85°C

Non-operating temp. ▶ STD. -20°C~+80°C/IND. -50°C~+95°C

Humidity ▶ 85% / 95% RH Non-Operating

Vibration ▶ 70 Hz to 2K Hz, 15G, 3 axes

Shock ▶ 0.5ms, 1500G, 3 axes

Altitude ▶ 70,000 feet

OS supported

- ▶ Windows series Embedded O.S. Linux, VxWorks and DOS

Functionality

- ▶ Support auto-run function
- ▶ A bootable disk for system recovery
- ▶ Support partition management, password and security

Power consumption

Power requirement ▶ 5V ± 10% via USB port

Reading mode ▶ 120.0 mA (Max.)

Writing mode ▶ 139.0 mA (Max.)

Idle mode ▶ 75.0 mA (Max.)

Reliability

Wear-leveling ▶ Static wearLeveling algorithms

MTBF ▶ > 3,000,000 hours

Erase counts ▶ Up to 60,000 times

ECC ▶ 72 bits per 1024 bytes block

Physical specification

Weight ▶ 15 g ± 1 g / 0.53 oz.

Dimension(W x L x H) ▶ 50.70 x 17.20 x 7.80 (mm)


Conformal coating ▶ Optional

Warranty

STD Grade SLC ▶ 3 years or within 60K Erasing counts

IND Grade SLC ▶ 5 years or within 60K Erasing counts

Part Number List

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	16GB	SMUFD016G-MPBTC-5L	WMUFD016G-MPBTH-5L
	32GB	SMUFD032G-MPBTC-5L	WMUFD032G-MPBTH-5L

Part Number Decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 — X17 X18 X19 X20

Example ▶

W M U F D 0 3 2 G — M P B T I — 5 L

X1 Grade

S : Standard grade operating temp. 0° C~70 ° C

W : Industrial grade operating temp. -40° C ~ +85 ° C

X2 The material of casing

M : Semi-metal casing

X3 X4 X5 Product category

UFD : USB flash disk

X6 X7 X8 X9 Capacity

016G : 16GB

032G : 32GB

X11 Controller

M : HERCULES Series

X12 X13 Controller version

A, B, C, D.....PB

X14 Flash IC brand

T : Toshiba SLC-NAND flash IC

X15 Flash IC grade

C : Commercial grade

I : Industrial grade

X17 X18 Housing Generation

5L : Generation 5 housing Long type

X19 X20 Reserved for specific requirement

C : Conformal coating (optional)