

## Features

- SLC-NAND flash technology
- Semi-metal casing design
- Optional color electronic plating (MOQ requested)
- Customized logo by laser engraving (MOQ requested)
- Capacities from 128MB up to 8GB



## Specification

■ <b>Compatibility</b>	USB 2.0 Hi-Speed and USB1.1
■ <b>Declarations</b>	RoHS & REACH compliant
■ <b>Flash technology</b>	SLC-NAND flash technology
■ <b>Form-factor</b>	Pen drive
■ <b>Host interface</b>	4 pins USB Type A connector
■ <b>Performance</b>	
➤ <b>Data transfer rate</b>	Hi-Speed up to 480 Mbps (60MB/s)
➤ <b>Sequential read</b>	31.5 MB/sec (Max.)
➤ <b>Sequential write</b>	24.5 MB/sec (Max.)
■ <b>Environmental</b>	
➤ <b>Operating temp.</b>	STD. 0°C~+70°C/IND. -40°C~+85°C
➤ <b>Non-operating temp.</b>	STD. -20°C~+80°C/IND. -50°C~+95°C
➤ <b>Humidity</b>	10%~95% non-condensing
➤ <b>Vibration</b>	70 Hz to 2K Hz, 15G, 3 axes
➤ <b>Shock</b>	0.5ms, 1500G, 3 axes
➤ <b>Altitude</b>	70,000 feet
■ <b>OS supported</b>	Windows series O.S.Linux, VxWorks and DOS

■ <b>Power consumption</b>	
➤ <b>Power requirement</b>	5V ± 10% via USB port
➤ <b>Reading mode</b>	97.5 mA (Max.)
➤ <b>Writing mode</b>	110 mA (Max.)
➤ <b>Idle mode</b>	58.7 mA (Max.)
■ <b>Reliability</b>	
➤ <b>Wear-leveling</b>	Static wear-leveling algorithms
➤ <b>TBW</b>	Up to 56.1 TBW at 8GB Capacity (Client workload by JESD-219A)
➤ <b>MTBF</b>	> 3,000,000 hours
➤ <b>Erase counts</b>	Up to 60,000 times
➤ <b>ECC</b>	72 bits per 1024 bytes block
■ <b>Physical specification</b>	
➤ <b>Weight (Max.)</b>	10g
➤ <b>Dimension (WxLxH)</b>	17.20 x 47.20 x 7.80 (mm)
■ <b>Conformal coating</b>	Optional
■ <b>Warranty</b>	
➤ <b>SLC STD. grade</b>	3 years or within 60,000 erasing counts
➤ <b>SLC IND. grade</b>	5 years or within 60,000 erasing counts

## Part Number List

Capacity	0°C~+70°C	Capacity	-40°C~+85°C
128MB	SMUFD128M-MPDTC-5	128MB	WMUFD128M-MPDTI-5
256MB	SMUFD256M-MPDTC-5	256MB	WMUFD256M-MPDTI-5
512MB	SMUFD512M-MPDTC-5	512MB	WMUFD512M-MPDTI-5
1GB	SMUFD001G-MPDTC-5	1GB	WMUFD001G-MPDTI-5
2GB	SMUFD002G-MPDTC-5	2GB	WMUFD002G-MPDTI-5
4GB	SMUFD004G-MPDTC-5	4GB	WMUFD004G-MPDTI-5
8GB	SMUFD008G-MPDTC-5	8GB	WMUFD008G-MPDTI-5

## Part Number Decoder

X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20
W	M	U	F	D	0	0	8	G	-	M	P	D	T	I	-	5	C		

### 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

128M : 128MB    002G : 2GB  
256M : 256MB    004G : 4GB  
512M : 512MB    008G : 8GB  
001G : 1GB

### X11 Controller

M : HERCULES Series

### X12 X13 Controller version

A, B, C, D.....PD

### X14 Flash IC brand

T : Toshiba SLC-NAND flash IC

### X15 Flash IC grade

C : Commercial grade  
I : Industrial grade

### X17 Housing Generation

5 : Generation 5 housing

### X18 X19 X20 Reserved for specific requirements

C : Conformal coating (optional)