

## mSATA

### SME1B



#### GENERAL INFORMATION

TYPE	mSATA	
INTERFACE	Serial ATA Revision 3.1	
DATA TRANSFER MODE	SATA 1.5Gbps, 3.0Gbps, 6.0Gbps	
CONNECTOR	52 pin. Edge	
OUTLINE DIMENSIONS	50.8 x 29.85 mm	
SERIES	SME1B	
CONTROLLER TYPE	 TDK GBDriver GS1	
FLASH TYPE	SLC	pSLC/MLC
DENSITY RANGE	16 GB - 64 GB	pSLC:16 GB - 128 GB MLC:32 GB - 256 GB
DATA RETENTION	10 years @ life begin-10% 1 year @ life end	
ENDURANCE ENTERPRISE WL	100,000 P/E Cycles *Flash Block Level	pSLC:20,000 P/E Cycles MLC:3,000 P/E Cycles *Flash Block Level

#### TEMPERATURE

OPERATING TEMPERATURE	Commercial:0°C to +70°C Industrial:-40°C to +85°C
STORAGE TEMPERATURE	Commercial:-25°C to +85°C Industrial:-40°C to +85°C

#### PERFORMANCE

Read (max.)	340 MByte/sec	pSLC:345 MByte/sec MLC:295 MByte/sec
Write (max.)	105 MByte/sec	pSLC:145 MByte/sec MLC:75 MByte/sec

#### ROBUSTNESS

MTBF	≥ 2,000,000 hours
SHOCK	1500G,0.5ms
VIBRATION	20G,10-2000Hz
HUMIDITY	0 to 90 % RH (No condensation)

#### ELECTRICAL DATA

VOLTAGE	3.3 V ± 5 %
POWER CONSUMPTION	<ul style="list-style-type: none"> <li>- Read:385mA max.</li> <li>- Write:370mA max.</li> <li>- Slumber:less than 100mA</li> </ul>

#### FEATURE LIST

FEATURES & TOOLS	<ul style="list-style-type: none"> <li>- In-House Designed Controller (HW/FW)               <ul style="list-style-type: none"> <li>- Power Fail Data Safety</li> <li>- Power Back-up Circuit</li> </ul> </li> <li>- Global static wear leveling               <ul style="list-style-type: none"> <li>- SMART</li> <li>- NCQ, TRIM</li> </ul> </li> <li>- AES 128/256bit encryption</li> </ul>	
PART NUMBER	SME1BxxxxTXDxB00SAA0	SME1BxxxxTxDxB00SAA0