# Apacer

## The Most **Reliable** Storage For Industries

SM230-297





# Apacer

### SM230-297

#### **Overview**

Apacer SM230-297 is a well-balanced solid-state drive (SSD) with compact form factor (JEDEC MO-297) and great performance. With the SATA 6.0 Gbps interface, the mSATA SSD is able to deliver exceptional read/write speed, making it the ideal companion for heavy-loading embedded or server operations with space constraints for host computing systems.



In regard of reliability, the drive comes with various implementations including powerful hardware ECC engine, power saving modes, wear leveling, flash block management, S.M.A.R.T., TRIM, and power failure management.

Last but not the least, with Advanced Encryption Standard (AES) and Trusted Computing Group (TCG) Opal support, SM230-297 ensures data security and provides users with a peace of mind knowing their data is safeguarded against unauthorized use at all times.

#### **Feature**

- · Built-in hardware ECC
- · Global Wear Leveling
- · Flash bad-block management
- · Flash Translation Layer: Page Mapping
- · S.M.A.R.T.
- · Power Failure Management
- · ATA Secure Frase
- · TRIM command support
- · Support TCG Opal 2.0/AES 256-bit encryption

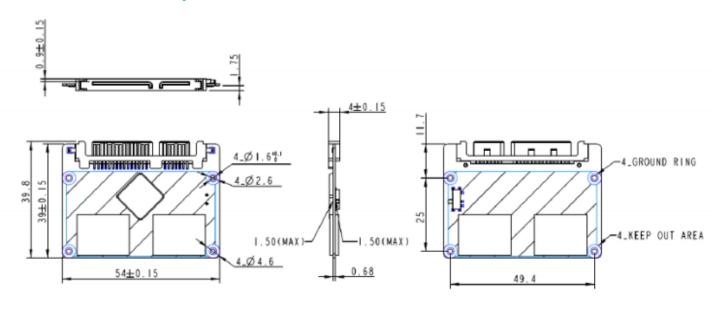


## **Specifications**

| Model                                | SM230-297  |
|--------------------------------------|--|
| Interface                            | SATA 3.0 (6Gb/s)   |
| Connector                            | (7+15) pin male  |
| Form Factor                          | JEDEC MO-297   |
| NAND Flash Type                      | MLC  |
| Capacity                             | 32GB~512GB   |
| External DRAM                        | No   |
| Sustained Read Performance (MB/sec)  | Up to 560  |
| Sustained Write Performance (MB/sec) | Up to 495  |
| ECC Engine                           | Built-in 40-bit per 1K bytes BCH ECC   |
| IOPS (4K Random Write)               | 57K  |
| Standard Operating Temperature (°C)  | 0~+70  |
| Extended Operating Temperature (°C)  | -40 ~ + 85   |
| Storage Temperature ( °C )           | -40 ~ + 100  |
| Thermal Sensor                       | Optional   |
| Shock                                | Operation: 50G, 11ms Non-operation: 1500G, 0.5ms   |
| Vibration                            | Operation: 7.69 Grms, 20~2000 Hz/random<br>(compliant with MIL-STD-810G)<br>Non-operation: 4.02 Grms, 15 ~ 2000 Hz/sine<br>(compliant with MIL-STD-810G) |
| Operating Voltage                    | 5.0 V ± 5%   |
| Power Consumption                    | Active mode: 620 mA / Idle mode: 90 mA   |
| Dimension (L x W x H )               | Without housing:<br>54 x 39.8 x 4 (mm)   |
| MTBF (hours)                         | >1,000,000   |
|                                      |  |



### **Mechanical Specification**



Unit: mm

### For more information, contact your Apacer representative

#### **Global Presence**

Taiwan (Headquarters) Apacer Technology Inc. Tel: +886-2-2267-8000 Fax: +886-2-2267-2261

Apacer Technology B.V.

Tel: +31-40-267-0000

Fax: +31-40-290-0686

Apacer Technology Corp. Apacer Technologies Pvt. Ltd. Tel: +81-3-5419-2668 Tel: +91-80-41529061~3 Fax: +81-3-5419-0018 Fax: +91-80-41700215

U.S.A.

Apacer Memory America, Inc. Tel: +1-408-518-8699 Fax: 1-510-249-9551

China

Apacer Electronic(Shanghai) Co., Ltd.

Tel: +86-21-6228-9939