



## DuraFlash™

# RD230m | SD 6.1 | microSD Card

SMART's DuraFlash, high-capacity, RD230m microSD Memory Cards are fully UHS-I compliant. The RD230m microSD Cards are offered in industrial temperature with capacities from 32GB to 256GB. They are specifically designed to meet strict industrial operating and environmental requirements as in IIoT, medical, automotive and military applications.

Incorporating onboard error detection and correction algorithms and static and dynamic wear-leveling techniques, SMART's RD230m microSD Cards ensure years of reliable operation over a product's life.



### Features & Benefits

- Capacities: 64GB to 256GB (SDXC), 32GB (SDHC)
- SD UHS-I Compliant
- Support I-Temp (-40°C to +85°C)
- Low Power Dissipation
- Onboard Wear-Leveling

### Applications

- Automotive
- IIoT
- Medical
- Military

### Product Family Overview

Capacity	Sequential Performance
<b>RD230m   SD 6.1   microSD Card</b>	
32GB to 256GB	Up to 95MB/s Read; Up to 55MB/s Write

# Specifications

RD230m   SD 6.1   microSD Card	
NAND Type	TLC
<b>Performance</b>	
Host Interface Rate (maximum)	SD 6.1 (SDR 104)
Capacities	32GB to 256GB
Sequential Read (maximum)	Up to 95MB/s
Sequential Write (maximum)	Up to 55MB/s
<b>Reliability</b>	
MTBF	> 3,000,000 hours
Data Reliability	< 1 Non-Recoverable Error in 10 <sup>17</sup> bits read
Data Retention	10 years >90% life remaining 1 year at the end of life
Endurance (Sequential Workload) <sup>1</sup>	256GB: 700 TBW 128GB: 350 TBW 64GB: 175 TBW 32GB: 87 TBW
<b>Environmental</b>	
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction
Vibration	20G 80-2000Hz, 1.52mm 20-80Hz, 3 axis
Storage Temperature	Industrial: -40°C to +85°C
Storage Temperature	-40°C to +85°C
Humidity	40°C, Operation: 90% RH, Storage: 93% RH
<b>Physical</b>	
Length	15.0mm
Width	11.0mm
Thickness	1.0mm

<sup>1</sup>Endurance is directly related to the User Specific Workload.

DuraFlash Product Grading System

**SE** Standard Endurance | TLC

**HE** High Endurance | eTLC

**PE** Premium Endurance | eTLC (OP 28%)

**UE** Ultra Endurance | pSLC



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