DuraFlash™

RU150 | USB 2.0 | USB Flash Drive

SMART's DuraFlash RU150 USB Flash drives provide low power, high capacity mass storage for embedded applications. RU150 USB Flash drives use an injection molding process to fit the smallest form factor requirements. They provide enhanced reliability by incorporating onboard error detection and correction, and static and dynamic wear-leveling algorithms that provide reliable operation over a product's life.

RU150 USB Flash drives are offered with Single-Level Cell (SLC) NAND Flash in capacities of 1GB to 16GB. SLC NAND provides superior durability and reliability over Multi-Level Cell (MLC) NAND technology. The RU150 USB Flash drives are an ideal choice for mission-critical enterprise IT and field service applications.

Features & Benefits

- SLC NAND Technology
- Zero Seek Time
- Noiseless Operation
- Low Power Dissipation
- Field Upgradeable Firmware via USB Bus
- Small Form Factor

Applications

- Server Firmware Upgrades
- Specialized Industrial Applications

Product Family Overview

Capacity	Sequential Performance
**RU150	USB 2.0	USB Flash Drive**	
1GB to 16GB	Up to 34MB/s Read; Up to 27MB/s Write

Specifications

	RU150 | USB 2.0 | USB Flash Drive
NAND Type	SLC
Performance	
Sequential Read (maximum)	34MB/s
Sequential Write (maximum)	27MB/s
Reliability	
Data Retention	10 years > 90% life remaining 1 year < 10% life remaining
Endurance	3 TBW per GB of capacity
Error Correction	Advanced multi-bit error correction
Power	
Vcc	Typical: 5.0 V Maximum: 5.5 V
Read	Typical: 100 mA Maximum: 130 mA
Write	Typical: 100 mA Maximum: 130 mA
Idle	Typical: 50 mA Maximum: 60 mA
Environmental	
Shock/Acceleration	Operating Half-Sine 70 in/sec, 3 shocks along each axis, X, Y, Z, in each direction
Vibration Operating	0.9 g rms, 10-500 Hz, 30 minutes per side (total of 6 sides)
Vibration Non-Operating	Random 13.6 g rms, 10-500 Hz, 30 minutes per side (total of 6 sides)
Operating Temperature	Commercial: 0°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	5% to 95%, non-condensing, relative humidity
Physical	
Length	54.55 mm
Width	15.49 mm
Height	8.3 mm

Ordering Information

Part Number	Density
RU150 | USB 2.0 | USB Flash Drive **Commercial Operating Temperature (0°C to +70°C)**	
SH9MK16GQDU	16GB
SH9MK8GQCU	8GB
SH9MK4GQBU	4GB
SS9MK2GQAB (32nm)	2GB
SH9MK2GQAU	2GB
SS9MK1GQ9B (32nm)	1GB
SH9MK1GQ9U	1GB

SMART ®
Modular Technologies

For more information, please visit: **www.smartm.com**

Headquarters/North America:

T: (+1) 800-956-7627 • T: (+1) 510-623-1231
F: (+1) 510-623-1434 • E: info@smartm.com

Latin America:

T: (+55) 11 4417-7200 • E: sales.br@smartm.com

Asia/Pacific:

T: (+65) 6678-7670 • E: sales.asia@smartm.com

EMEA:

T: (+44) 0 7826-064-745 • E: sales.euro@smartm.com

Customer Service:

T: (+1) 510-623-1231 • E: customers@smartm.com