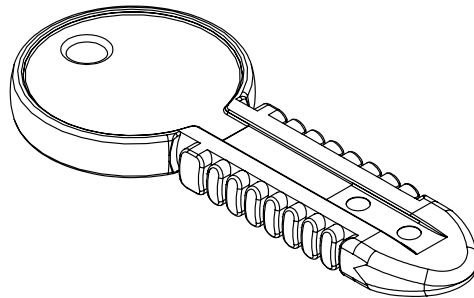
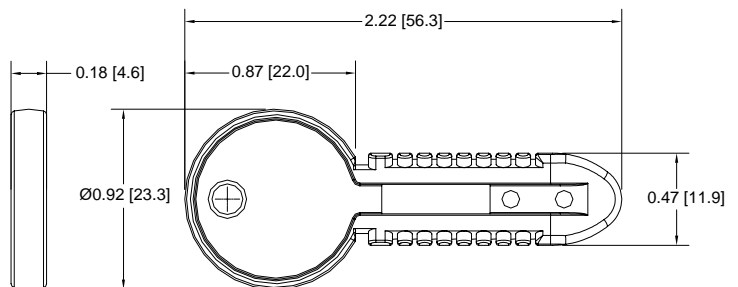


Datakey Electronics' ISK Series of Keys are economical 1Kbit to 256Kbit data carriers that provide convenient data storage and transfer for high-volume, end-user applications. Each ISK Key contains a non-volatile, serial I<sup>2</sup>C<sup>1</sup> EEPROM that can be read, erased, and written to via a Keyceptacle<sup>®</sup> (which is available in panel-mount and board-mount forms) or KeyLink<sup>™</sup> Reader/Writers that can easily interface to PCs and other hardware via a standard RS-232 or USB port. A molded, synthetic body protects the embedded memory from harsh environmental influences, so it retains data even when exposed to dirt, moisture, chemicals, X-rays, and up to 10kV of electrostatic discharge.

Mechanical	
Contact Life	15,000 Insertions/Removal Cycles Min.
Contact Arrangement	Fully Redundant (Top:Bottom)
Key Head Shear Limit	15 Pounds
Key Twist Torque Limit	15 Inch-pounds
Electrical <sup>1</sup>	
Power, Active	25 milliwatts typical at 5V
Power, Standby	200 microwatts typical at 5V
Voltage <sup>3</sup>	2.7 to 5.5V
ESD Protection	10kV (per Std. 064-1028)
Device Address	Zero (0), consult factory for options
Environmental	
Storage Temperature	-40° C to + 100° C
Operating Temperature	-40° C to + 85° C
Relative Humidity	5% to 95% (non-condensing)
Memory <sup>1</sup>	
Key:	Capacity:
ISK1000	1Kb (1,024 bits) 128 x 8
ISK4000	4Kb (4,096 bits) 512 x 8
ISK16000	16Kb (16,384 bits) 2048 x 8
ISK64000	64Kb (65,536) 8192 x 8
ISK256K	256Kb (262,144) 32,768 x 8
Read Cycles	Unlimited
Write/Erase Cycles	1,000,000 Cycles Minimum
Data Life (Storage)	10 Years Minimum
Mating Component(s)	
Panel-Mount Keyceptacle <sup>®</sup>	KC4210 Series
PCB Mount Keyceptacle	KC4210PCB
Reader/Writer	KeyLink <sup>™</sup> III (recommended), KeyLink <sup>™</sup> II
Ordering Information <sup>2</sup>	
ISK1000	611-0055-00XA
ISK4000	611-0056-00XA
ISK16000	611-0057-00XA
ISK64K	611-0163-00XA
ISK256K	611-0058-00XA



Refer to Keyceptacle<sup>®</sup> data sheets for pin-out information. Other Key head designs and customization are also available. Contact factory.



Drawing dimensions are in inches and millimeters [mm]. Dimensions are nominal and subject to manufacturer's tolerances.

### NOTES:

- 1: Complete I<sup>2</sup>C Interface Specification available at: [http://www.datakeyelectronics.com/technical\\_inter\\_specs.html](http://www.datakeyelectronics.com/technical_inter_specs.html)
- 2: "X" indicates optional color number. "A" suffix on part number indicates RoHS compliance.

- 3: **Design Recommendation:** It is recommended that all new Key/Token implementations be designed to operate with power supplies in the range of 2.7 to 3.6 volts. Although there is no immediate or certain future difficulties in the procurement of memory devices that operate with V<sub>cc</sub> in the 4.5 to 5.5 volt range, it is possible the future availability of such memories may be impacted as semiconductor manufacturers continue to shrink their die geometries. Please contact the factory if you have any questions pertaining to this with your current or legacy design.

