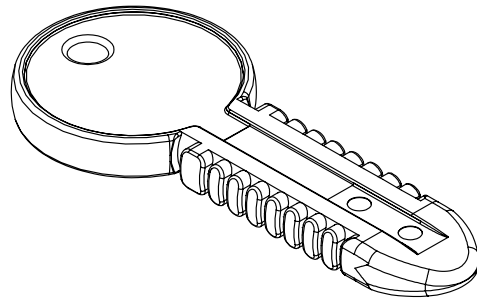
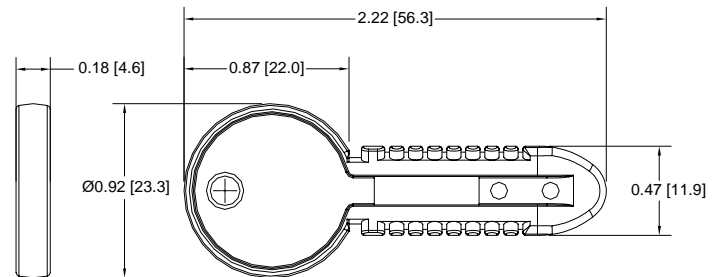


Datakey Electronics' IIK Series of Keys provide security-enhanced data storage and transfer for end-user applications. Each IIK Key contains a non-volatile, serial I²C¹ EEPROM that can be read, erased, and written to via a Keyceptacle[®] (which is available in both panel-mount and board-mount forms) or the KeyLink[™] Reader/Writers. The EEPROM in the IIK Key has a unique factory-embedded serial number that cannot be changed by the user. The unique serial number can be used to prevent duplication of Keys by using the serial number as a unique encryption seed or by having the host system store a list of authorized serial numbers. A solid-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 ¹ | |
| Power, Active | 25 milliwatts @ 5.0V (max.) |
| Power, Standby | 100 microwatts @ 5.0V (max) |
| Voltage ³ | 2.7 to 5.5V |
| ESD Protection | 10kV (per Std. 064-1028) |
| Environmental | |
| Storage Temperature | -40° C to + 100° C |
| Operating Temperature | -40° C to + 85° C |
| Relative Humidity | 5% to 95% (non-condensing) |
| Memory ¹ | |
| Key: | Capacity: |
| IIK | 1536 bits (192 bytes) |
| Read Cycles | Unlimited |
| Write/Erase Cycles | 100,000 Cycles Minimum |
| Data Life (Storage) | 10 Years Minimum |
| Mating Component(s) | |
| Panel-Mount Keyceptacle [®] | KC4210 Series |
| PCB Mount Keyceptacle [®] | KC4210PCB |
| Reader/Writer | KeyLink [™] III (recommended), KeyLink [™] II |
| Ordering Information ² | |
| IIK Series | 611-0168-00XA |



Refer to Keyceptacle[®] data sheets for pin-out information. Other Key head designs and customization are also available. Contact factory.



NOTES:

- Complete I²C Interface Specification available at: http://www.datakeyelectronics.com/technical_inter_specs.html
- "X" indicates optional color number. "A" suffix on part number indicates RoHS compliance.
- 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_{cc} 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.

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

