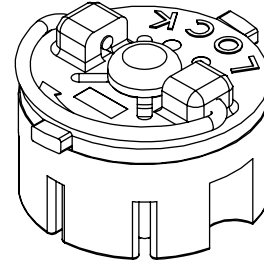
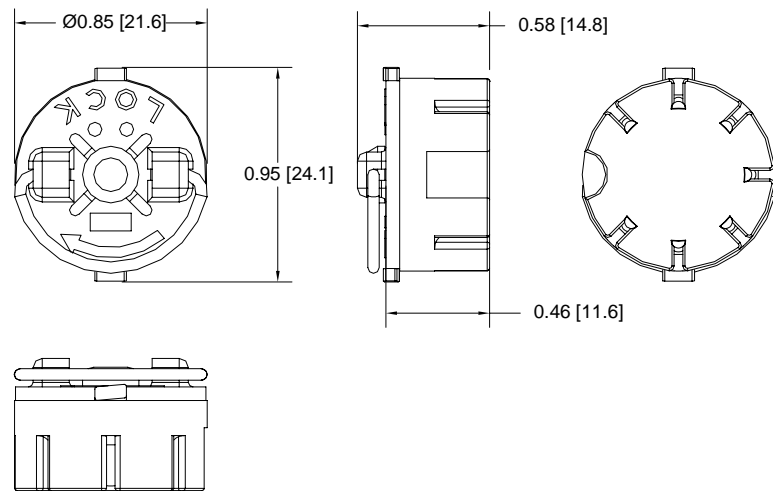


The KSD Series is a portable “plug” data carrier with a 1Kb or 4Kb non-volatile serial Microwire¹ EEPROM memory that is sealed against moisture and other corrosive elements. Designed to perform in harsh environments, the KSD provides corrosion-resistant contacts and is resistant to vibration, static, magnetic fields, X-ray radiation, and drop shock. The KSD requires 3.3 to 5.0 volts to operate and can be easily added to both new and existing systems. Small enough to carry in a pocket or on a keychain, the KSD serves as a convenient way to store and transfer data, such as encryption keys for use with mobile computer and communications equipment.

| Mechanical | |
|-----------------------------------|---|
| Color | Black (1Kb) or Black w/Gray Top (4Kb) |
| Weight | 8.5 g (0.3 ounces) maximum |
| Bail Torque | 1.4 Nm (12 inch-pounds) maximum |
| Bail Pull | 67 N (15 pounds) minimum 110 N (25 pounds) maximum |
| Contact Life | 10,000 minimum insertion/removals |
| Shock | Meets or exceeds MIL-STD-883F, Method 2002.4 Test Condition A |
| Vibration | Meets or exceeds MIL-STD-883F, Method 2007.3 Test Condition A |
| Electrical ² | |
| Power, Active | 25 milliwatts, typical |
| Power, Standby | 250 microwatts, typical |
| Voltage ^{2,3} | 3.3 to 5V |
| ESD Protection | 12kV |
| Environmental | |
| Storage Temperature | -40° C to +100° C |
| Operating Temperature | -40° C to + 85° C |
| Relative Humidity | 0% to 95% (non-condensing) |
| Memory ¹ | |
| Token: | Capacity: |
| KSD1000 | 1Kb (1024 bits) 64 x 16 |
| KSD4000 | 4Kb (4096 bits) 256 x 16 |
| Read Cycles | Unlimited |
| Write/Erase Cycles | 1,000,000 Minimum |
| Data Life | 10 Years Minimum |
| Mating Component(s) | |
| KSD Receptacle | 615-0004-000A |
| Reader/Writer | Consult factory. |
| Ordering Information ⁴ | |
| KSD1000 | 614-0002-004A |
| KSD4000 | 614-0005-000A |



Refer to KSD Receptacle data sheet for pin-out information.



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

NOTES:

- 1: Complete Microwire Interface Specification available at: http://www.datakeyelectronics.com/technical_inter_specs.html
- 2: The Bulk Erase command is not supported at < 4.6V.
- 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_{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.
- 4: “A” suffix on part number indicates RoHS compliance.

