KSD Series
Serial Memory Plug Tokens

Datakey®

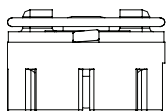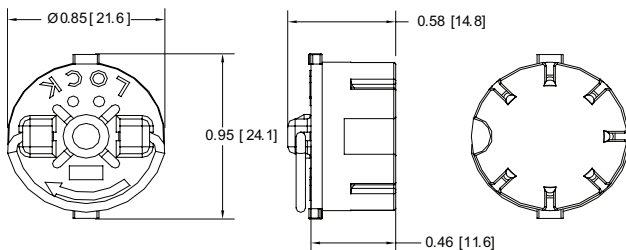The power of memory. Secured.

The KSD series of plug memory tokens contain 1Kb to 4 Kb of non-volatile, serial Microwire[1] EEPROM memory. The KSD token features corrosion-resistant contacts and is molded using a rugged composite, which protects the embedded memory from harsh environmental influences, so it retains data even when exposed to dirt, moisture, chemicals, X-rays, and electrostatic discharge. The KSD token features a locking mechanism, making it well-suited for high-vibration applications. It also uses a foldable bail, providing a means of easily inserting and removing the token, while folding flat to allow for a flush mount.

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

NOTES:
Conforms with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011, and as amended by Directive 2015/863/EU, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

CE

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

MECHANICAL	
Color	Black (1 Kb) or Black w/Gray Top (4 Kb)
Weight	8.5 g (0.3 oz) Maximum
Bail Torque	1.4 N-m (12 in-lbf) Maximum
Bail Pull	67 N (15 lbf) Minimum
	110 N (25 lbf) 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 mW, typical at 5 V
Power, Standby	250 μW, typical at 5 V
Voltage[2, 3]	2.7 to 5.5 V
ESD Protection	15 kV (air), 10 kV (contact)

ENVIRONMENTAL	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% to 95% (non-condensing)

MEMORY[1]	
Token:	Capacity:
KSD1Kb	1 Kb (1024 bits) 64 x 16
KSD4Kb	4 Kb (4096 bits) 256 x 16
Read Cycles	Unlimited
Write/Erase Cycles	1,000,000 Minimum
Data Life	10 Years Minimum

MATING COMPONENTS	
KSD Receptacle	615-0004-000A
KSDLink III Programmer	699-0057-0001A

ORDERING INFORMATION[4]	
KSD1000	614-0002-004A
KSD4000	614-0005-000A

1: Complete Microwire interface specification available at www.datakey.com
2: The bulk erase command is not supported at < 4.5V.
3: 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 are no immediate difficulties in procuring memory devices that operate in the 4.5 to 5.5 volt range, future availability may be impacted as semiconductor manufacturers shrink their die geometries.
4: "A" suffix on part number indicates RoHS compliance. See CE declaration to the left for details.

View our full product line at www.datakey.com

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