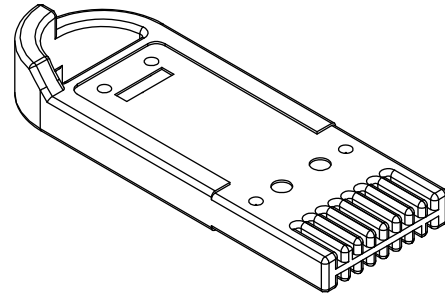
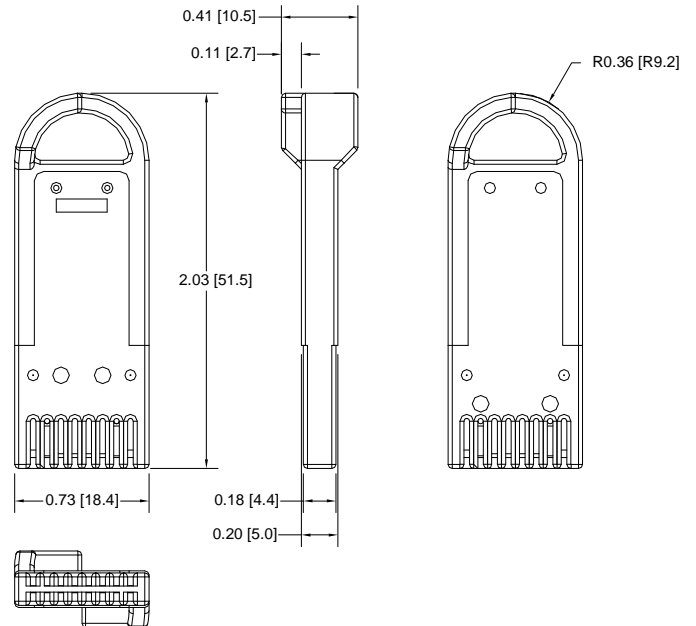


Datakey Electronics' SSX Extended SlimLine™ Token contains 2Kb to 256Kb non-volatile SPI<sup>1</sup> Serial EEPROM memory. A thin profile and space-saving interface connection make the SSX well suited for use in compact systems. Typical applications include access control and lower capacity data transfer. The SSX Extended Token is constructed of tough, synthetic materials that protect the memory from harsh environmental influences including dirt, moisture, chemicals, X-rays, and electrostatic discharge. Data stored in the device can be read, written to, and erased via a simple interface to your host hardware, or accessed through convenient SlimLink™ Reader/Writers.

Mechanical	
Contact Life	10,000 Insertions/Removal Cycles Min.
Contact Arrangement	Fully Redundant (Front:Back)
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	15kV (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 <sup>1</sup>	
Token:	Capacity:
SSX2Kb	2Kb (2048 bits) 256 x 8
SSX16000	16Kb (16,384 bits) 2048 x 8
SSX64000	64Kb (65,536 bits) 8192 x 8
SSX256K	256Kb (262,144 bits) 32,768 x 8
Read Cycles	Unlimited
Write/Erase Cycles	1,000,000 Cycles Minimum <sup>4</sup>
Data Life (Storage)	10 Years Minimum
Mating Component(s)	
Panel-Mount Receptacle	SR4210
PCB Mount Receptacle	SR4000 Family of Receptacles
Reader/Writer	SlimLink™ III (recommended), SlimLink™ II
Ordering Information <sup>2</sup>	
SSX2000	611-0121-00XA
SSX16000	611-0122-00XA
SSX64000	611-0123-00XA
SSX256K	611-0124-00XA



For pin-out information, refer to the individual data sheets for the SR4000 Family of Receptacles.



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

#### NOTES:

- 1: Complete SPI 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  $V_{cc}$  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: SSX256Kb Extended Tokens manufactured prior to 2007 have a 100,000 write/erase cycle minimum.

