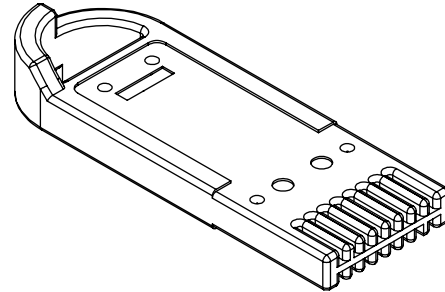
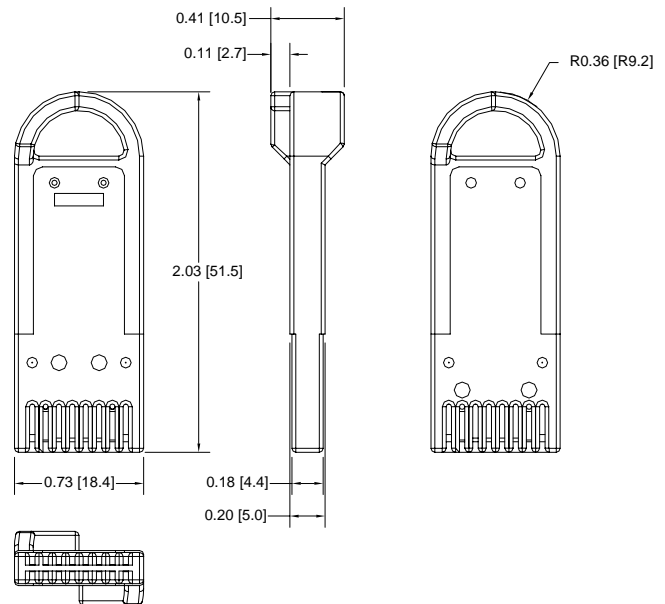


The ISX Series is an ergonomic Extended SlimLine™ Token with 1Kbit to 512Kbit non-volatile, serial I<sup>2</sup>C<sup>1</sup> EEPROM memories that can be read, written, and erased via a simple interface to your host hardware, or accessed through SlimLink™ Reader/Writers. A thin profile and space-saving interface connection makes them especially well suited for use in compact systems. This Token is constructed of tough, synthetic materials that protect its embedded memories from harsh environmental influences, such as dirt, moisture, chemicals, X-rays, and electrostatic discharge.

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)
Device Address	Zero (0), consult factory for ISX512K and other 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>	
Token	Capacity:
ISX1000	1Kb (1,024 bits) 128 x 8
ISX4000	4Kb (4,096 bits) 512 x 8
ISX16000	16Kb (16,384 bits) 2048 x 8
ISX64000	64Kb (65,536 bits) 8192 x 8
ISX256K	256Kb (262,144 bits) 32,768 x 8
ISX512K	512Kb (524,288) 32,768 x 8 x 2
Read Cycles	Unlimited
Write/Erase Cycles	1,000,000 Cycles Minimum
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>	
ISX1000	611-0150-00XA
ISX4000	611-0151-00XA
ISX16000	611-0152-00XA
ISX64000	611-0153-00XA
ISX256K	611-0059-00XA
ISX512K <sup>4</sup>	611-0060-00XA



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 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.
- 4: ISX512K is not recommended for new designs. Contact the factory with any questions.

