

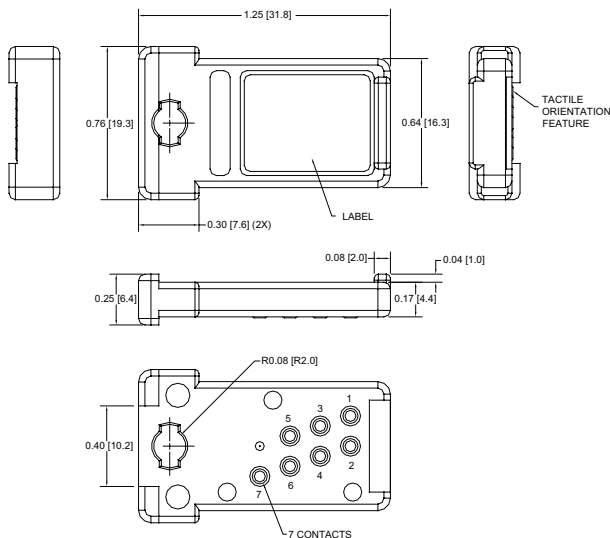
# ISB Series

## Serial Memory Bar Tokens

The ISB series of Bar memory tokens contain 1 Kb to 256 Kb non-volatile, serial I<sup>2</sup>C EEPROM memory<sup>1</sup>. The memory is solid over-molded using a rugged composite that protects the embedded memory and is resistant to environmental influences such as vibration, ice, dirt, moisture, chemicals, and electrostatic discharge. Each token features a writable label<sup>4</sup> and is small enough to be carried in a pocket or to be placed on a keychain or lanyard. The ISB token is an ideal credential or low-capacity data transfer solution for harsh environment applications.



For pin-out information, refer to the datasheet for the Bar series of receptacles.



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

- 1: Complete I<sup>2</sup>C interface specification available at: [www.datakey.com](http://www.datakey.com).
  - 2: See Bar receptacle datasheet for mechanical and environmental specifications when mated.
  - 3: "x" indicates optional color number. Contact ATEK for available color options. "A" suffix on part number indicates RoHS compliance.
  - 4: Label compatible with ball point pen (non-erasable), pencil (erasable) and grease pencil (erasable).
  - 5: 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.
- \* Contact ATEK for additional token and/or label color options

MECHANICAL <sup>2</sup>	
Color*	Black Body with White Label <sup>4</sup>
Weight	3.6 g (0.13 oz), Typical
Contact Life	15,000 Insertion/Removal Cycles Min.
Drop Test	Multiple 10-ft Drops to Concrete
ELECTRICAL <sup>1</sup>	
Power, Active	25 mW, Typical at 5 V
Power, Standby	200 μW, Typical at 5 V
Voltage	2.7 V to 5.5 V (3.3 V recommended) <sup>5</sup>
ESD Protection	15 kV (air discharge) EN 61000-4-2
	EMI Reduction Circuitry On-board
ENVIRONMENTAL <sup>2</sup>	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	0% to 95% (non-condensing)
Immersion	MIL-STD-810F, Method 512.4 Proc. I
Salt-Fog	MIL-STD-810F, Method 509.4 Proc. I
Freezing Rain	MIL-STD-810F, Method 521.2 Proc. I; Glaze Ice
Altitude	≤ 40,000 ft (12,192 m)
Solar Radiation	MIL-STD-810F, Method 505.4, Proc. II
Other	Contact ATEK for Further Information on Additional Qualification Tests (including thermal shock, fungus, & chemical resistance)
MEMORY <sup>1</sup>	
Capacity	1 Kb (1024 bits), 4 Kb (4,096 bits), 16 Kb (16,384 bits), 64 Kb (65,536 bits), 256 Kb (262,144 bits)
Read Cycles	Unlimited
Write/Erase Cycles	1,000,000 Minimum
Data Life (Storage)	20 Years Minimum
MATING COMPONENTS <sup>3</sup>	
Bar Receptacle BRLG, BRLN	606-0068-000A, 606-0068-001A
Bar Receptacle BRSG, BRSN	606-0069-000A, 606-0069-001A
Programmer	669-0120-000A
ORDERING INFORMATION <sup>3</sup>	
ISB1Kb	611-0187-00xA
ISB4Kb	611-0188-00xA
ISB16Kb	611-0189-00xA
ISB64Kb	611-0190-00xA
ISB256Kb	611-0191-00xA

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



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View the full product line at [www.datakey.com](http://www.datakey.com)

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