Mini-Bar Series

Receptacles with Header

Datakey®

The power of memory. Secured.

The Mini-Bar series is the smallest portable memory form factor in the Datakey product line. Measuring only 0.64 inches in length, Mini-Bar receptacles are 65% smaller than Bar receptacles[5]. Mini-Bar receptacles mate with all Mini-Bar memory tokens (see Mini-Bar token datasheets for more information[2]). The receptacles are designed to mount on the surface of an OEM device (enclosure, housing, panel, etc.) or can be integrated into a corner, with only the header pins extending into the device for electrical connection. This mounting method minimizes the amount of interior space required. Mini-Bar receptacles are available with or without an adhesive gasket. The receptacle is secured using two screws (not included). A low-profile off-the-shelf ribbon cable may be used to connect the receptacle to internal circuitry.

Designed for use in the most challenging environments, the Mini-Bar series meets several MIL-STD-810 specifications, provides an intuitive slide-in/slide out operation, and features an open design for easy in-field cleaning. The Mini-Bar receptacle also features a retention pin that helps to keep the token firmly in place during operation – standing up to the most demanding shock and vibration requirements.

MECHANICAL	
Operating Life	25,000 Insertion/Removal Cycles Min.
Vibration[3]	MIL-STD-810H, Method 514.8, Proc. I
Shock[3]	MIL-STD-810H, Method 516.8, Proc. I Operating[4]: 40 *g* 11 ms – Typical Token Retention: >250 *g* 5-6 ms – Typical (token retained in receptacle)
ELECTRICAL	
Contact Resistance	< 100 mΩ
ENVIRONMENTAL	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% - 95% (non-condensing)
Immersion	MIL-STD-810H, Method 512.6, Proc. I
Salt-Fog	MIL-STD-810H, Method 509.8, Proc. I
Blowing Dust	MIL-STD-810H, Method 510.7, Proc. I
Blowing Sand	MIL-STD-810H, Method 510.7, Proc. II
Freezing Rain	MIL-STD-810H, Method 521.4, Glaze Ice
Altitude	MIL-STD-810H, Method 500.6, Proc. I & II ≤40,000 ft (12,192 m)
Solar Radiation	MIL-STD-810H, Method 505.7, Proc II
Other	Contact ATEK for Further Information on Additional Qualification Tests (including thermal shock, fungus & chemical resistance)
MOUNTING COMPONENT(S)	
Threaded Fasteners	(2) #0-80 thread, max thread engagement: 0.125", max torque rating: 2.5 in-lbf (28 N-cm)
Gasket (where included)	3M VHB Adhesive Gasket – 0.015" (0.38 mm) Nominal Thickness
INTERFACING COMPONENT(S)	
Connector	Würth p/n: 62100821021 Header 0.05" pitch 2x4 Mates with Samtec FFSD Ribbon Cable or Similar
MATING COMPONENTS	
Memory Tokens	SSJ and ISJ Series of Mini-Bar Memory Tokens
ORDERING INFORMATION[1]	
MBRHG	606-0080-000A (8-pin header, gasket)
MBRHN	606-0080-001A (8-pin header, no gasket)

1: "A" suffix on part number indicates RoHS compliance.
2: Customers must design to meet Datakey interface specifications to provide for future memory device compatibility. Interface specifications available at datakey.com.
3: Specification for receptacle with mated token.
4: No discontinuities greater than one microsecond allowed.
5: Volume comparison between BRLN and MBRHN

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.

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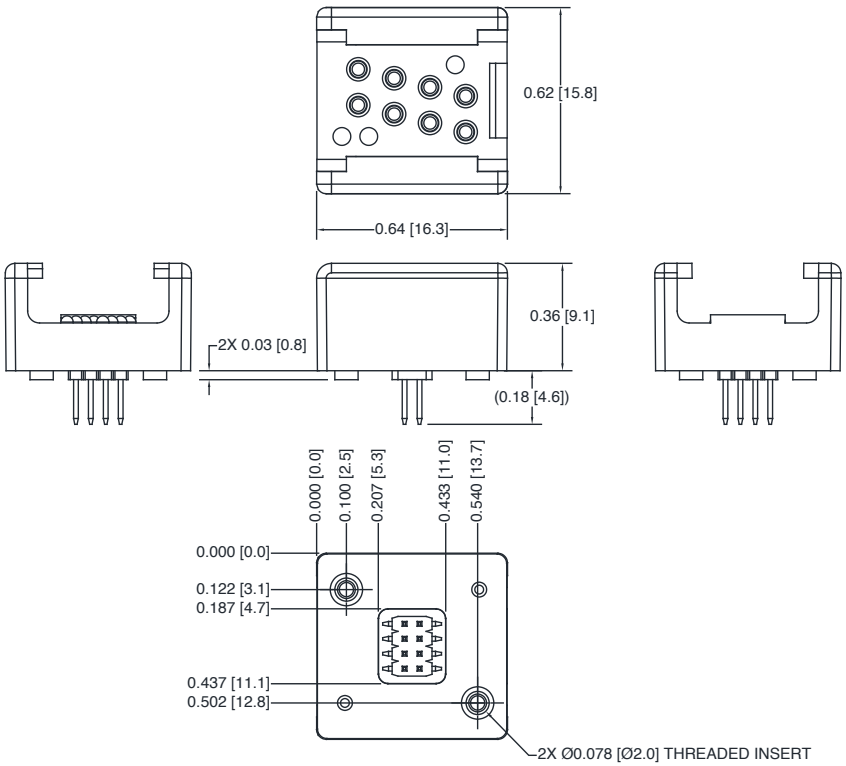
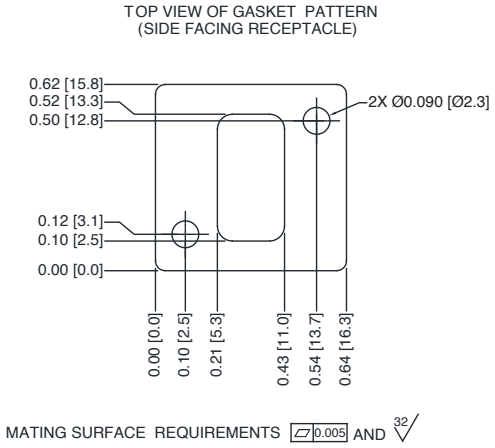
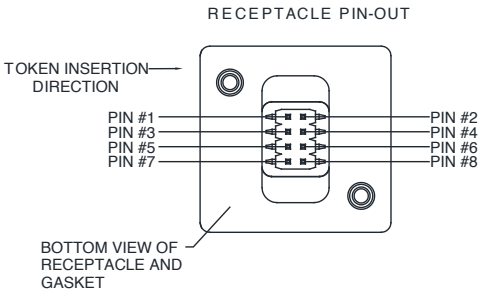


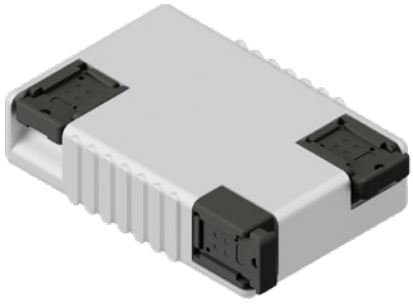


Drawing dimensions are in inches and millimeters [mm].
Dimensions are nominal and subject to manufacturer's tolerances.

PIN-OUT CHART

Pin #	I²C	SPI
1	LOFO	LOFO
2	Ground (GND)	Ground (GND)
3	Power (V_{CC})	Power (V_{CC})
4	Size	/Chip Select (/CS)
5	Serial Clock (SCL)	Serial Clock (SCK)
6	NC	Serial Data In (SI)
7	Serial Add/Data (SDA)	Serial Data Out (SO)
8	NC	NC





Installation Recommendations: Mini-Bar receptacles are designed to be mounted on the surface of an OEM device (enclosure, housing, panel, etc.). It is also possible to flush-mount the Mini-Bar receptacle by incorporating it into a slot or corner as shown (left). The OEM should provide a slot for the header connector to protrude into the housing. The opening may also have to account for the mating connector as well. The receptacle is mounted using an optional adhesive gasket and two #0-80 threaded inserts (screws provided by the OEM -- hex drive screw recommended). Contact ATEK with questions on mounting and installation.

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View our full product line at **www.datakey.com**

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