

Bar Series

Receptacles

Bar receptacles mate with all Bar memory tokens (see Bar token datasheet for more information). The receptacles are designed to mount on the surface of an OEM device (enclosure, housing, panel, etc.) with only the contact pins extending into a device for electrical connection. This mounting method minimizes the amount of interior space required to integrate the receptacle into the OEM device. The Bar receptacles are available with or without an adhesive gasket. The receptacle is secured using two screws. Connection to the receptacle's contact pins² is made with "push-on" style connectors and the contact pins are available in two standard lengths to accommodate various wall thicknesses and mating connectors.

Designed for use in the most challenging environments, the 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 Bar receptacle also incorporates internal design features to reduce electromagnetic emissions. The receptacle also features a retention pin that provides tactile feedback when the token is fully inserted and helps keep the token firmly in place during operation—standing up to the most demanding shock and vibration requirements.



- 1: "A" suffix on part number indicates RoHS compliance.
- 2: No soldering to the contact pins allowed if immersion required.
- 3: Customers must design to meet Datakey interface specifications to provide for future memory device compatibility. Interface specifications available at datakey.com.
- 4: Consult ATEK for more information.
- 5: Specification for receptacle with mated token.
- 6: No discontinuities greater than one microsecond allowed.

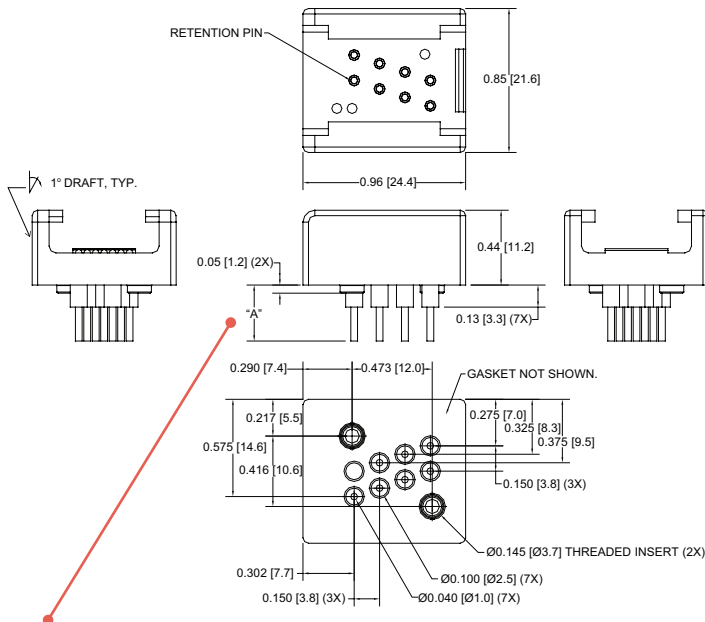
NOTES:

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.

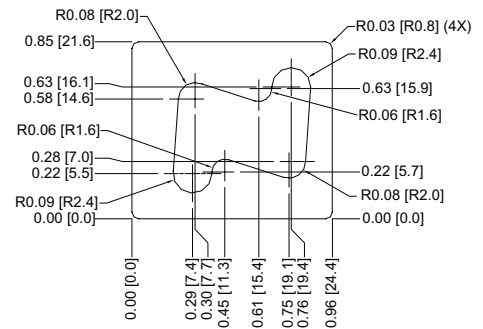
MECHANICAL	
Operating Life	25,000 Insertion/Removal Cycles Min.
Vibration ⁵	MIL-STD-810F, Method 514.5, Proc. I Figure 514.5C-17 (Operating ⁶)
Shock ⁵	MIL-STD-810F, Method 516.5, Proc. I Operating⁶: 40 g, 15-23 ms – Typical Token Retention: >200 g, 3 ms – Typical (token fully retained in receptacle)
Acceleration ⁵	MIL-STD-810F, Method 513.5, Proc. II 10 g, All Axes (operating ⁶)
ELECTRICAL	
Contact Resistance	< 100 mΩ EMI Reduction Circuitry On-board
ENVIRONMENTAL	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% to 95% (non-condensing)
Immersion ²	MIL-STD-810F, Method 512.4 Proc. I Exceeds 1 m/30 min (IP67) - Non-operating
Salt-Fog	MIL-STD-810F, Method 509.4 Proc. I
Blowing Dust	MIL-STD-810F, Method 510.4 Proc. I
Blowing Sand	MIL-STD-810F, Method 510.4 Proc. II; Helicopter Over Unpaved Surface
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 Factory for Further Information on Additional Qualification Tests (including thermal shock, fungus, & chemical resistance)
MOUNTING COMPONENT(S)	
Threaded Fasteners	(2) #4-40 Thread, 0.17" (4.3 mm) Max. Thread Engagement, Max. Torque Rating: 8.0 in-lbf (90 N-cm)
Gasket (where included)	Adhesive Gasket – 0.015" (0.38 mm) Nominal Thickness
Mating Connector ²	Push-on Style for 0.040" (1.0 mm) Pin Diam.
MATING COMPONENT(S)	
Data Carriers	LCB, ISB, SSB Series of Bar Memory Tokens
ORDERING INFORMATION ¹	
BRLG	606-0068-000A (long pins, gasket)
BRLN	606-0068-001A (long pins, no gasket)
BRSG	606-0069-000A (short pins, gasket)
BRSN	606-0069-001A (short pins, no gasket)



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TOP VIEW OF GASKET PATTERN (SIDE FACING RECEPTACLE)



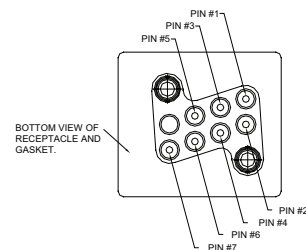
MOUNTING SURFACE REQUIREMENTS: $\sqrt{0.005}$ AND $\sqrt{\quad}$

PART NUMBER	A (IN / MM)
606-0068-00xA	0.33 [8.4]
606-0069-00xA	0.25 [6.3]

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

PIN-OUT CHART			
Pin #	Microwire	I ² C	SPI
1	LOFO	LOFO	LOFO
2	Ground (GND)	Ground (GND)	Ground (GND)
3	Power (V _{cc})	Power (V _{cc})	Power (V _{cc})
4	Chip Select (CS)	SIZE	/Chip Select (/CS)
5	Serial Clock (SK)	Serial Clock (SCL)	Serial Clock (SCK)
6	Data In (DI)	NC	Serial Data In (SI)
7	Data Out (DO)	Serial Add/Data (SDA)	Serial Data Out (SO)

RECEPTACLE PIN-OUT



Installation Recommendations: The Bar receptacle is designed to be mounted on the surface of an OEM device (enclosure, housing, panel, etc.). It is also possible to flush-mount the bar receptacle (and token head if desired) by incorporating it into a "slot" or "groove" as shown in Figure A. The OEM can provide for a larger slot that allows all pins to protrude through into the OEM device. If the device is conductive, care should be taken by the OEM such that the Bar receptacle contact pins do not come in contact with the housing. An adhesive gasket (included) is used along with (2) #4-40 threaded inserts (screws provided by the OEM) to secure the receptacle to the OEM device. Contact ATEK for more information.

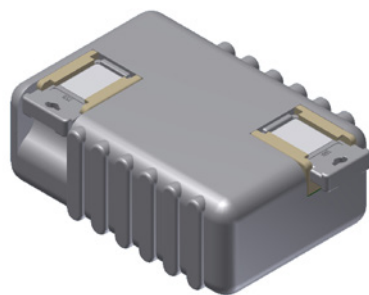


Figure A: Flush Mounting Ideas

221-0162-000 Rev. E 10/14

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