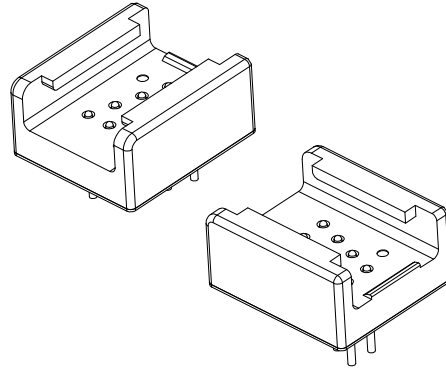


The Bar Series Receptacle is an "on-surface" mount interface connector that mates with all Datakey Electronics' Bar Series Tokens (see Bar Token data sheets for more information). The Receptacle is designed to mount on the surface of an OEM device (enclosure, housing, panel, etc.) with contact pins that extend into that device for electrical connection. This mounting method minimizes the amount of interior space required to integrate the Receptacle into the OEM device. The Bar Receptacle ships with an adhesive gasket which contributes to the product's installation and sealing. Models without the adhesive gasket are also available. The Receptacle is further secured using threaded inserts (2) resident in the Receptacle. Connection to the Receptacle's contact pins<sup>2</sup> is made with "push-on" style connectors and the contact pins are available in different lengths (including custom length options) to accommodate various wall thicknesses and mating connectors. Contact the factory for more details.

Designed for use in the most challenging environments, the Bar family meets several MIL-STD-810F 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 vibration and shock requirements.

Mechanical	
Operating Life	25,000 insertion/removal cycles min.
Vibration <sup>5</sup>	MIL-STD-810F, Method 514.5, Proc. I Figure 514.5C-17 (Operating <sup>6</sup> )
Shock <sup>5</sup>	MIL-STD-810F, Method 516.5, Proc. I <b>Operating<sup>6</sup></b> : 40g, 15-23ms – typical <b>Token Retention</b> : >200g, 3ms – typical (Token fully retained in Receptacle)
Acceleration <sup>5</sup>	MIL-STD-810F, Method 513.5, Proc. II 10g, all axes (Operating <sup>6</sup> )
Electrical <sup>3</sup>	
Contact Resistance	< 100 milliohm
	EMI reduction circuitry on-board
Environmental	
Storage Temperature	-40°C to +100°C
Operating Temperature	-40°C to +85°C
Relative Humidity	5% - 95% (non-condensing)
Immersion <sup>2</sup>	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 meters)
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)

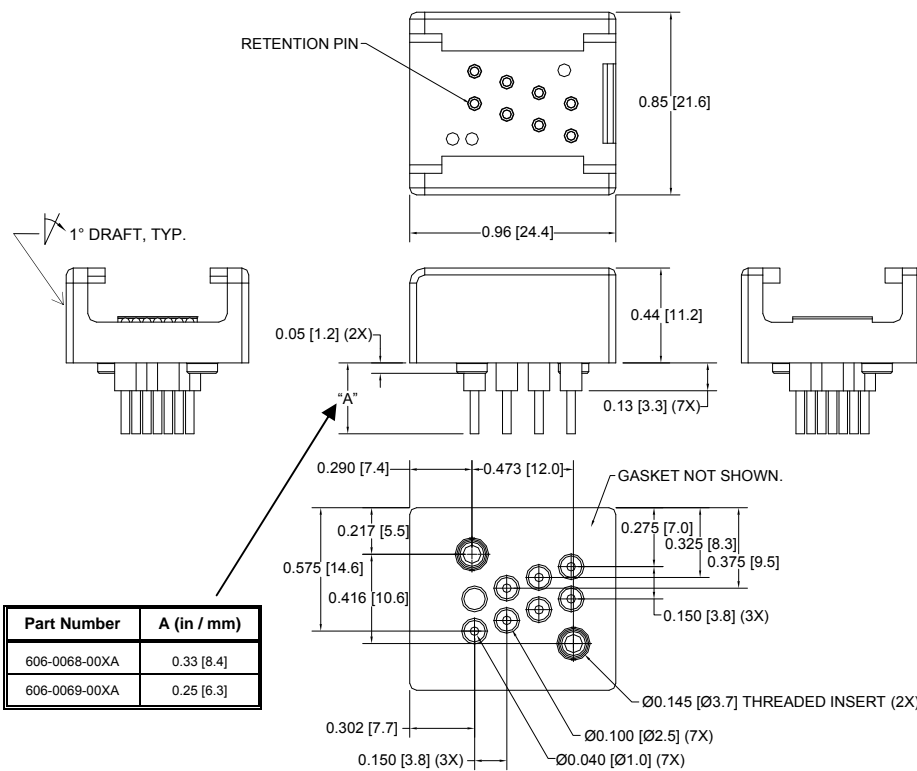


Mounting Component(s)	
Threaded Fasteners	(2) #4-40 thread 0.17" (4.3mm) max. thread engagement Max. torque rating: 8.0 in-lb (90 N-cm)
Gasket (standard models)	Adhesive gasket (included) – 0.015" (0.38mm) nominal thickness
Mating Connector <sup>2</sup>	Push-on style for 0.040" (1.0mm) pin diam.
Mating Component(s)	
Data Carriers	LCB, ISB, SSB Series of Bar Tokens
Ordering Information <sup>1</sup>	
Bar Receptacle (see other side for detail)	606-0068-000A (long pins) 606-0068-001A (long pins, no gasket)
	606-0069-000A (short pins) 606-0069-001A (short pins, no gasket)

**NOTES:**

- 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 Electronics' Interface Specifications to provide for future data carrier compatibility. Available at [http://www.datakeyelectronics.com/technical\\_inter\\_specs.html](http://www.datakeyelectronics.com/technical_inter_specs.html)
- 4: Consult factory for more information.
- 5: Specification for Receptacle with mated Token.
- 6: No discontinuities greater than one microsecond allowed.



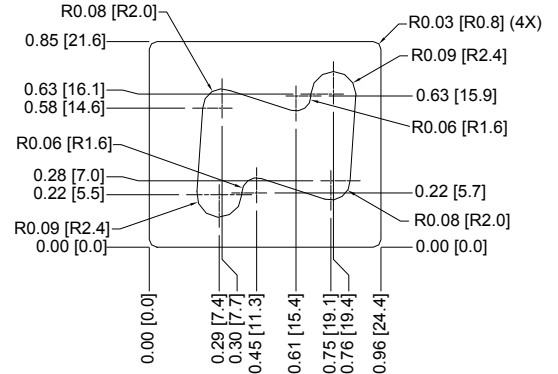


Part Number	A (in / mm)
606-0068-00XA	0.33 [8.4]
606-0069-00XA	0.25 [6.3]

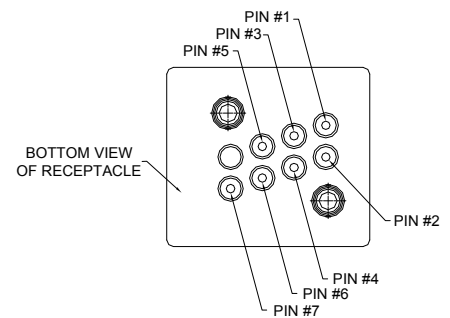
Drawing dimensions are in inches and millimeters [mm].  
Dimensions are nominal and subject to manufacturer's tolerances.

Pin-Out Chart			
Pin #	Microwire	I <sup>2</sup> C	SPI
Pin 1	LOFO	LOFO	LOFO
Pin 2	Ground (GND)	Ground (GND)	Ground (GND)
Pin 3	Power (V <sub>cc</sub> )	Power (V <sub>cc</sub> )	Power (V <sub>cc</sub> )
Pin 4	Chip Select (CS)	SIZE	/Chip Select (/CS)
Pin 5	Serial Clock (SK)	Serial Clock (SCL)	Serial Clock (SCK)
Pin 6	Data In (DI)	NC	Serial Data In (SI)
Pin 7	Data Out (DO)	Serial Add/Data (SDA)	Serial Data Out (SO)

TOP VIEW OF GASKET PATTERN  
(SIDE FACING RECEPTACLE)



MOUNTING SURFACE REQUIREMENTS:  $\square$  0.005 AND  $\surd$  32°



RECEPTACLE PIN-OUT

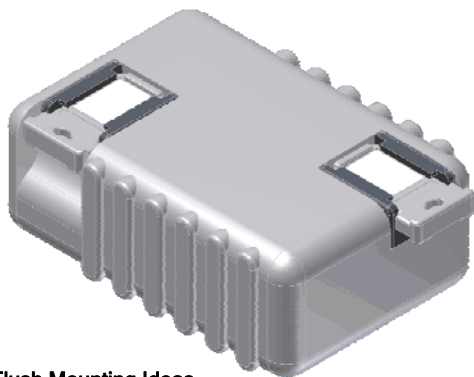


Figure A: Flush Mounting Ideas

**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 either individual holes in their device for the Receptacle contact pins or 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. In both cases, an adhesive gasket (included with Receptacle) is used along with (2) #4-40 threaded inserts (screws provided by the OEM) to secure the Receptacle to the OEM device. Contact the factory for more information.

