

## KSD Receptacle Serial Memory Receptacle

The KSD Receptacle is an interface and a connector for all serial memory (Microwire, I<sup>2</sup>C, SPI)<sup>1</sup> “Plug” data carriers. The device provides the physical and electrical connection between the carrier and the host hardware over a minimum operating life of 10,000 insertions and removals. This rugged Receptacle provides resistance to environmental hazards such as sand, dust, salt-fog, rain, magnetic fields, drop shock, and ESD. It employs a wiping action that removes dirt and corrosive residue with every insertion and removal of the Plug. The KSD Receptacle is only 1.1” [28 mm] x 0.7” [18 mm], so it requires minimal console space. It is particularly well suited for use in outdoor and mobile applications that require a tough, weatherproof interface.

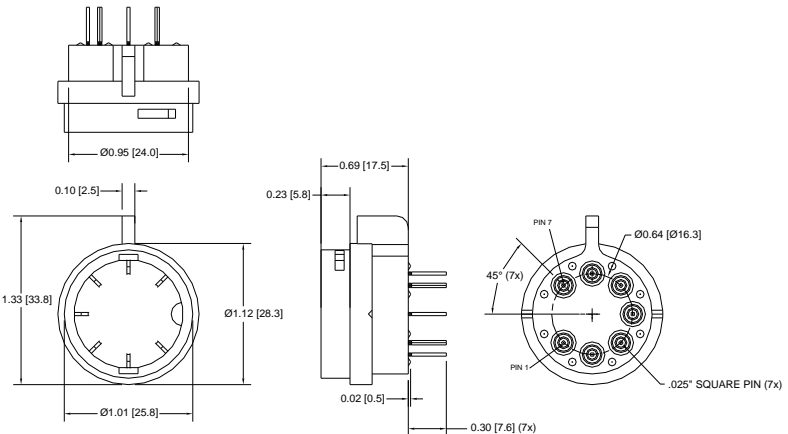
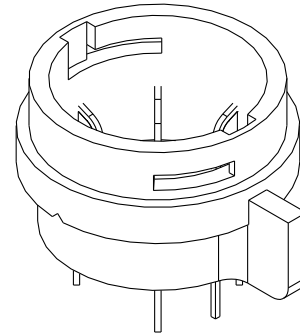
Mechanical	
Color	Black
Weight	8.5 g (0.3 ounces) maximum
Thread Torque	1.4 Nm (12 inch-pounds) maximum
Thread Pull	155 N (35 pounds) minimum
Contact Life	10,000 minimum insertion/removals
Electrical <sup>1</sup>	
Contact Resistance	5 Ω maximum
Resistance Between Contacts	10 MΩ minimum
Environmental	
Storage Temperature	-40° C to +100° C
Operating Temperature	-40° C to +85° C
Relative Humidity	0% to 95% (non-condensing)
Mating Component(s)	
Data Carriers	All serial memory Plugs
KSD Light-Duty Cap	329-0169-000A
Ordering Information <sup>2</sup>	
KSD Receptacle	615-0004-000A

Pin-Out Chart <sup>1</sup>			
Pin #	Microwire	I <sup>2</sup> C	SPI
Pin 1	KGND <sup>3</sup>	KGND <sup>3</sup>	KGND <sup>3</sup>
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	SIZE/RST <sup>4</sup>	/Chip Select
Pin 5	Serial Clock	Serial Clock	Serial Clock
Pin 6	Data In	NC	Serial Data In
Pin 7	Data Out	SDA	Serial Data Out

NC=No Connection

### NOTES:

- 1: Complete Microwire, I<sup>2</sup>C & SPI Interface Specifications available at: [http://www.datakeyelectronics.com/technical\\_inter\\_specs.html](http://www.datakeyelectronics.com/technical_inter_specs.html)
- 2: “A” suffix on part number indicates RoHS compliance.
- 3: KGND is internally connected to GND. The host circuit can use this signal to detect the presence of the Token by pulling it to high (V<sub>cc</sub>) then a low (GND) signal indicates the Token is present.
- 4: RST signal used on IIP Series only.



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

