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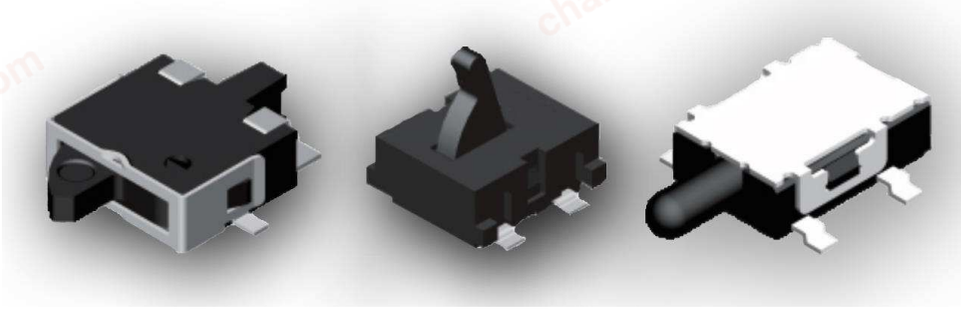
Applications

- Automotive
- Instrumentation
- White goods
- Telecommunications

Benefits

- RoHS Compliant
- Halogen and Lead Free
- Sharp detection feeling
- Compact Size

JJ Series – Detector Switches



TE Connectivity is pleased to introduce its JJ Series of Detector Switches, suitable for a wide variety of applications given their several presentations ranging from horizontal or vertical actuated options as well as Gull-winged, J-leaded and Through-Hole mounting possibilities.

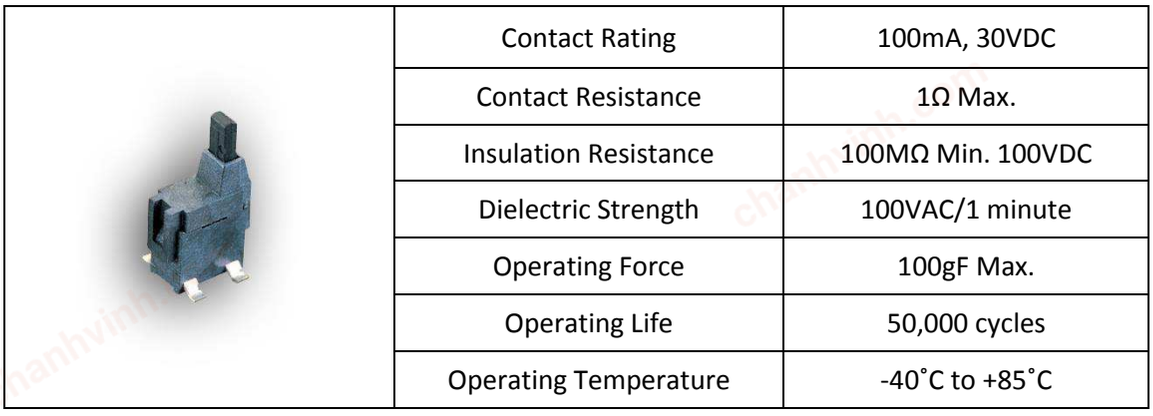
The Detector Switches will be offered in a wide range of sizes giving the possibility for countless applications going from automotive to telecommunications.

JJ Series – Family Classification

Series	Body Size
JJA	3.5x2.8 mm
JJB	3.5x2.98 mm
JJC	3.5x3.3 mm
JJD	4.2x3.6 mm
JJE	4.7x3.5 mm
JJF	4.7x3.8 mm
JJG	5.7x4.0 mm (High-Rating)
JJH	5.7x4.0 mm (Standard-Rating)
JJI	5.0x4.4 mm
JJJ	6.0x4.85 mm / 5.5x4.7 mm
JJK	6.3x3.0 mm
JJL	6.5x3.9 mm
JJM	5.7x4.0 mm
JJN	5.7x4.0 mm (Wedge)
JJO	10.0x3.8 mm
JJP	10.6x10.0 mm

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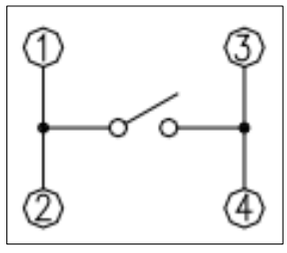
JJK Family – *6.3x3.0 mm*



Contact Rating	100mA, 30VDC
Contact Resistance	1Ω Max.
Insulation Resistance	100MΩ Min. 100VDC
Dielectric Strength	100VAC/1 minute
Operating Force	100gF Max.
Operating Life	50,000 cycles
Operating Temperature	-40˚C to +85˚C

Features	Applications
• Easy orientation offered by guiding post. • Soft feeling on operation actions • SMT type and reflow soldering for surface mounting	• Notebooks • Position mode detection mechanisms • Mobile phones and still cameras

Circuit



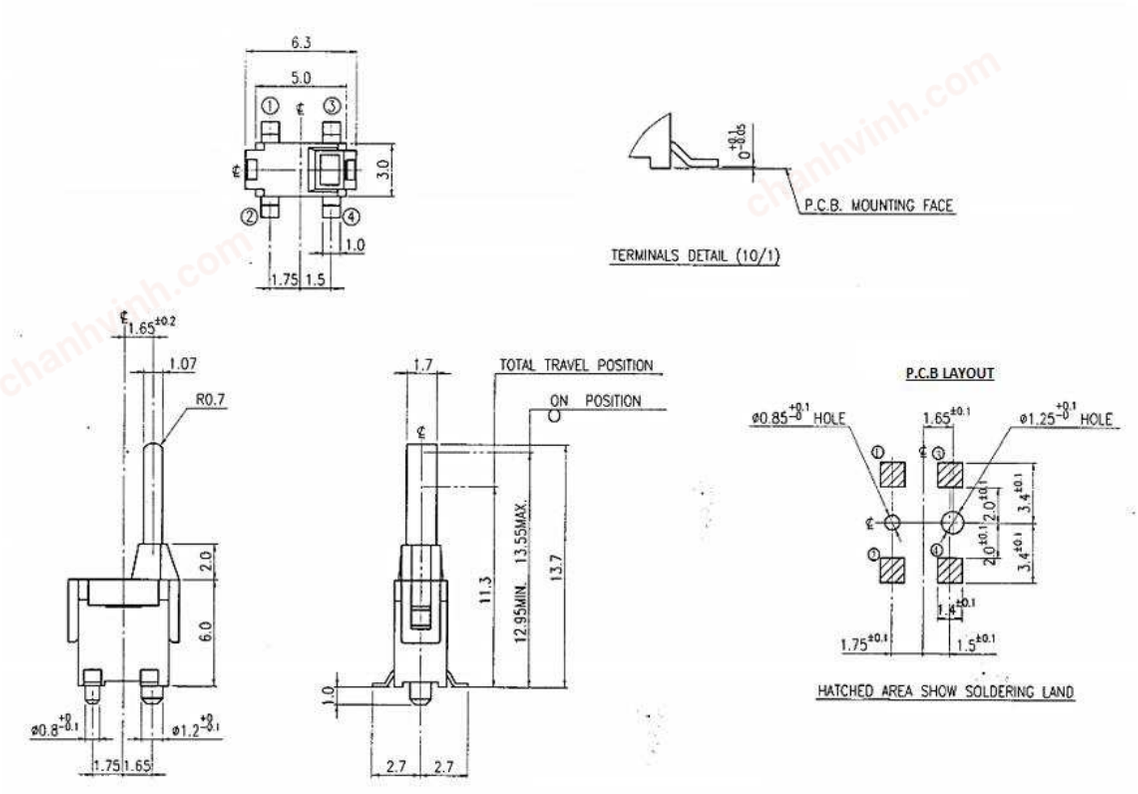
How To Order

JJK – V0 – U – G – 1300 – NO – P – P – R - TB

- **Family:** JJK
- **Orientation:** V0 – Vertical (Push)
- **Grounding:** U – Ungrounded
- **Mounting:** G – Gull-winged
- **Height:** 1300 – 13.7mm
- **Circuit:** NO – Normal Open
- **Guiding post:** P – Post
- **Cover:** P – Plastic Cover
- **Contact/Terminal Plating:** R – Silver Plating
- **Packaging:** TB – Tube

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Diagrams



PN List

Smart PN	Orientation	Grounding	Mounting	Height	Circuit	Guiding Post	Cover	Plating	Packaging	MOQ	TE PN
JJKV0UG1300NOPPRTB	Vertical Push	Ungrounded	Gull-winged	13.7mm	NO	Post	Plastic	Silver	Tube	2,000	2331350-1

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1. Test Conditions

Standard test conditions shall be 5 to 35℃ in temperature, 45 to 85% in humidity and 86 to 106kPa in atmospheric pressure. Should any doubt arise in judgment, tests shall be conducted at 20±2℃ in temperature, 60 to 70% in humidity and 86 to 106kPa in atmospheric pressure.

2. Operating Temperature Range: -40 to 85℃

3. Construction:

-Shape and dimension are subject to attached drawing regulation.
-Appearance: whole should be a good completion, no rust, no crack and good plating.

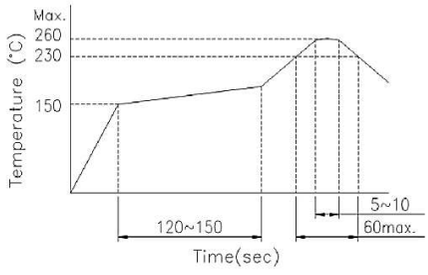
4. Current Rating: 1mA, 30VDC

5. Type of Actuation: Tactile feedback

6. Test Sequence:

	Item	Description	Test Conditions	Requirements
Appearance	1	Visual Examination	Physical inspection without applying any external forces.	There shall be no defects that affect the serviceability of the product.
Electric Performance	2	Contact Resistance	Shall be measured at 1Khz ± 200Hz (Max. 20mV, Max. 50mA) Or 1A, 5VDC. By voltage drop method.	1Ω Max.
	3	Insulation Resistance	Measurements shall be made at 100 VDC potential between terminals and cover.	100MΩ Min.
	4	Dielectric Withstanding Voltage	Apply 100 VAC (50Hz or 60Hz) between terminals and cover for 1 minute	There shall be no breakdown or flashover

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Mechanical Performance	5	Operating Force	----------	Shall be in accordance with individual specified
	6	Terminal Strength	The static load of 300gF shall be applied on top of the terminal in every direction for 1 minute, in optional direction on condition of once for one terminal.	No deformation of appearance, no breakdown of plastic part and no hindrance for electrical function.
	7	Control Strength	The static load of 1KgF shall be applied in the operating direction from the tip of the switch lever	No deformation of appearance, no breakdown of plastic part and no hindrance for electrical function.
	8	Solder Heat Resistance	1) Manual soldering: -Put in solder for 3 to 4 Sec. at 300℃±10℃ 2)Soldering by dip: -Put in solder for 5±1 Sec. at 260℃±5℃ 3) Reflow Soldering: -By far infrared ray  Above mentioned time-temperature chart is based on the temperature on the parts-mounting surface of PCB.	No deformation of appearance, no breakdown of plastic part and no hindrance for electrical function.
	9	Solderability	1) Solder temperature: 260 to 10℃ 2) Immersion time: 3 ± 0.5 Sec. at 260℃±10℃	More than 75% of the dipping part shall be covered by solder—Excluding the cutting Surface.
Durability	10	Life test	-With load: 50,000 times by 15-20 cycles/minute with load 30V DC 1mA (Resistive load). -Without load: 50,000 times by 15-20 cycles/minute without load.	1) Contact resistance: 2Ω Max. 2) Insulation resistance: 10MΩ Min. 3)Withstanding voltage: 100V AC for 1 Min. 4) Operating force: Within ±30% of initial value. 5) Appearance: Every part should not defect in appearance and mechanical performance.

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Water-Proof	11	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: 1) Temperature: -20±2℃ 2) Time: 96 hours	1) Contact resistance: 1Ω Max. 2) Insulation resistance: 10MΩ Min. 3)Withstanding voltage: 100V AC for 1 Min. 4) Operating force: Within ±30% of initial value. 5) Appearance: Every part should not defect in appearance and mechanical performance.
	12	Heat Resistance	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: 1) Temperature:85±2℃ 2) Time: 96 hours	1) Contact resistance: 1Ω Max. 2) Insulation resistance: 10MΩ Min. 3)Withstanding voltage: 100V AC for 1 Min. 4) Operating force: Within ±30% of initial value. 5) Appearance: Every part should not defect in appearance and mechanical performance.
	13	Humidity Resistance	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: 1) Temperature:40±2℃ 2) Relative Humidity: 90~95% 3) Time: 96 hours	1) Contact resistance: 1Ω Max. 2) Insulation resistance: 10MΩ Min. 3)Withstanding voltage: 100V AC for 1 Min. 4) Operating force: Within ±30% of initial value. 5) Appearance: Every part should not defect in appearance and mechanical performance.

■ Precautions in Handling

1. Care must be taken to ensure excess flux on the top surface of the printed circuit board does not adhere to the switch.
2. Do not wash the switch.

■ Recommended storage conditions:

Store the products in the original packaging material. After opening the package, the remaining products must be stored in the appropriate moisture-proof & airtight environment.

Do not store the switch in the following environment or it may affect performance and solderability:

1. temperatures below -10° C to 40°C & humidity at 85% (min)

2. environment with corrosive gas

3. storage over 6 months

4. place in direct sunlight